(No Model.)

C. J. EDWARDS.

SASH FASTENER.

No. 346,096. Patented July 27, 1886.

Fig. 1.

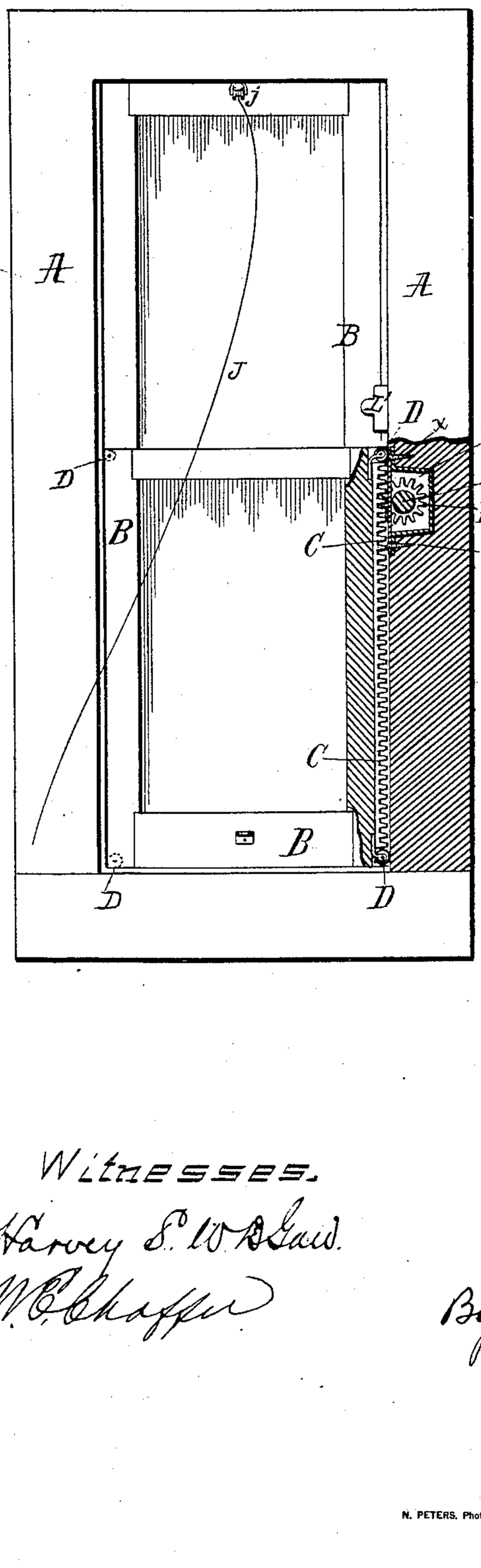


Fig. 2.

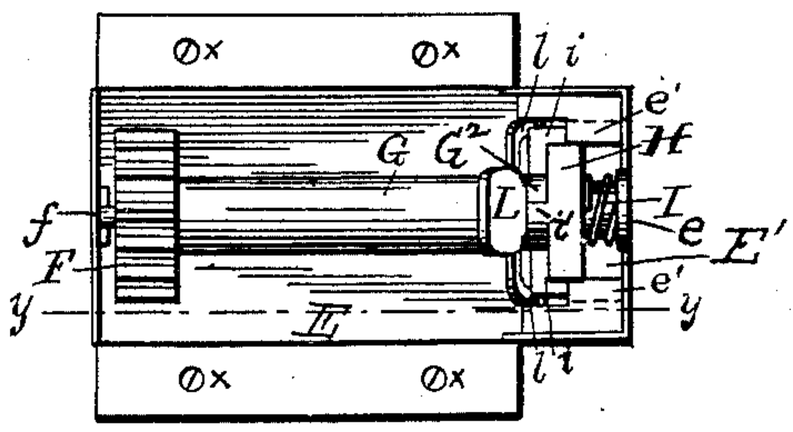


Fig. 3.

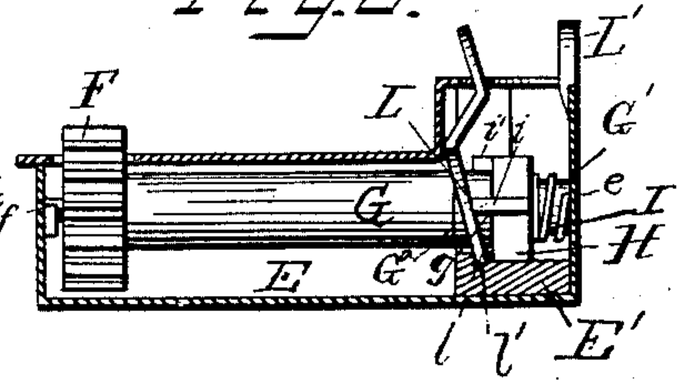


Fig. 4.

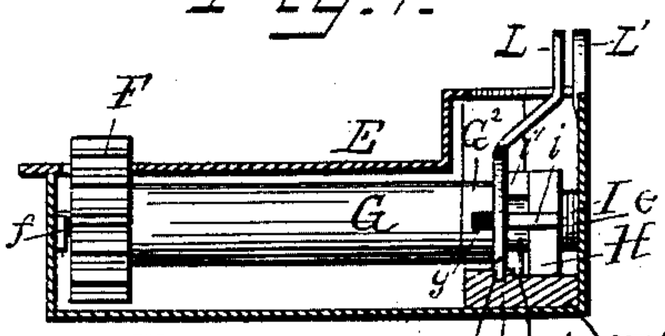
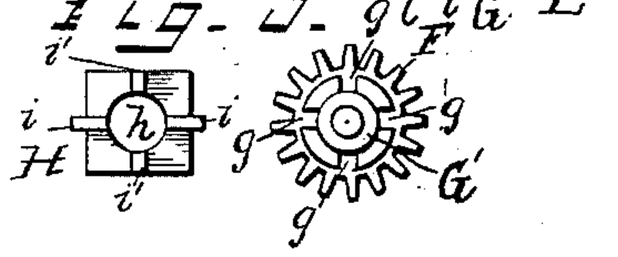


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES JOSEPH EDWARDS, OF FAIRVILLE, MISSOURI.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 346,096, dated July 27, 1886.

Application filed May 19, 1886. Serial No. 202,649. (No model.)

To all whom it may concern:

Be it known that I, CHARLES JOSEPH EDWARDS, a citizen of the United States, residing at Fairville, in the county of Saline and State of Missouri, have invented certain new and useful Improvements in Combined Sash Locks and Supports; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to sash-locks; and my said invention consists in certain novel construction and arrangement of the parts, whereby a window-sash may be held and securely locked at any desired height, as will hereinafter more fully appear.

In this invention the window-sashes are supplied along one edge with a rack, which meshes with a cogged wheel or pinion that is journaled in a box seated in the window-casing. The axle of this pinion is provided at one end with a novel form of locking device, whereby the movement of said pinion may be controlled as desired, the releasing of which locking device is effected by a thumb-piece or button, which projects from the face of the window-casing, and the re-engagement of said lock when released by the hand of the operator is effected by a reacting-spring. At each corner of the sash a roller is journaled, so that the free and easy movement of the said sash in the frame is assured.

The object of this invention is to provide a simple, cheap, and effective means, whereby the sashes of windows are securely held and locked in any position of the same, whether wholly or partially elevated or entirely closed, and in such manner that the sash cannot be raised or lowered the slightest degree without releasing the locking mechanism, and only from the interior of the room. A safe protection is therefore assured against forcible entrance through the window, unless the glass be broken, and this, too, even should the sash be left slightly open at top or bottom for ventilation.

Referring now to the accompanying drawings for a better understanding of the details of construction and operation of my invention, Figure 1 represents a vertical sectional elevation of a window supplied with my improved sash lock and support. Fig. 2 represents a detached view of the locking device in its box, as removed from the window-casing and with the cover thereof removed, and Fig. 3 is a vertical central sectional elevation of the same, showing the pinion as in its locked position; and Fig. 4 is a similar view showing the pinion in its unlocked or free position. Fig. 5 represents a face view of the locking-clutch and end of the pinion-shaft engaged by said clutch, showing the respective construction of these parts.

A A represent the casing of a window of the usual construction, and B B the sash thereof, along one edge of which is seated a rack, C C, of an equal length with the sash, and with the teeth thereof flush with the edge thereof, and at each corner of which sash is provided a roller, D.

E is a box or case, which contains the locking mechanism, which box is let into the casing A, as shown in Fig. 1, and secured therein by screws *x x*. The locking device consists of a pinion or toothed wheel, F, keyed to a shaft, G, whose journal-bearings are at each end of the box E, as seen at *e* and *f*, Figs. 2, 3, and 4. This pinion F meshes with the rack C on the window-sash, and at the opposite end of the shaft G of said pinion is the mechanism for effecting the locking of the wheel F, which is accomplished through said shaft, as follows: Seated within the end E′ of the box E in grooves *e′*, Fig. 2, provided for this purpose, is what I call a "sliding clutch," H, having a central opening, *h*, Fig. 5, through which passes the small end G′ of the shaft G, and formed on its face with a series of teeth or projections, *i*, and *i′*, the ones *i* entering the grooves *e′* in the box E, whereby the said clutch is held from turning. Behind this clutch H is a spring, I, for the purpose of projecting said clutch against the shouldered end G^2 of the shaft G, in which shoulder is formed slots *g*, Fig. 4, to receive the lugs or teeth *i i′* of the clutch H, whereby to effect the union of these parts and hold the shaft and its pinion-wheel from turning. Now, to permit said shaft to turn, a forked-shaped

lever, L, is provided, whose forked ends *l* are received in slots *l'*, Figs. 3 and 4, in the bottom of the box E, and which lever rests against the face of the clutch H. The top end of this lever projects from the outside of the box E, and the said box is also formed opposite to the position of said lever L, with a projection, L', to form the hand-hold for operating the clutch. As will, therefore, now be readily seen, a simple pressure of the lever L toward the projection L' causes a pressure upon the clutch H and forces the same back, carrying its teeth *i i'* out of mesh with the slots *g* in the shoulder G^2 of the shaft G and permits said shaft to revolve. Upon releasing the pressure upon the said lever L the resilience of the spring I exerted upon the clutch H causes it to re-engage the said shaft and again lock the same. Thus it will be seen the operation is very simple, all that is necessary being, simultaneously with operating the sash, to press the lever L. The parts being few are not liable to be easily injured or get of order. The rollers at the corners of the sash prevent the same from binding and make its movement free and easy.

To assist in operating the sash, a cord, J, may be secured thereto, passing over a pulley, *j*, secured at the top of casing A.

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

1. The combination, in a sash-lock, with the box E, formed with the projection L', and sliding clutch H *i*, mounted in slots in said box, of the forked lever L *l*, seated in the bottom of said box for operating the clutch, as shown and described.

2. The combination, in a sash lock and support, with the sash having a rack along one edge, and pinion F upon a shaft, G, meshing with said rack, of the sliding clutch H *i i'*, spring I, and lever L, arranged within a box or case, E, seated in the window-casing, as shown and described, for the purposes specified.

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

CHARLES JOSEPH EDWARDS.

Witnesses:
T. A. EDWARDS,
T. H. HARVEY.