(No Model.)

R. A. HAEGELIN.

SASH LOCK.

No. 589,653. Patented Sept. 7, 1897.

Fig. 1.

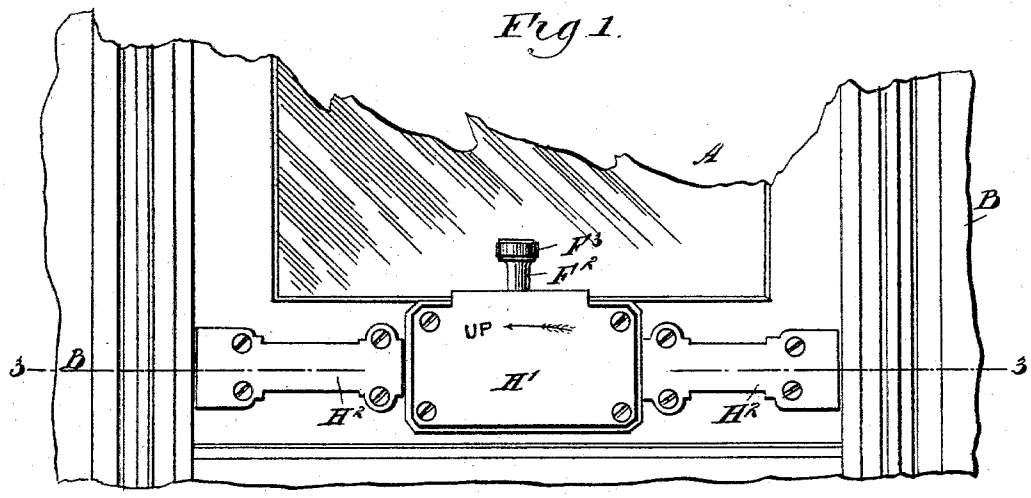


Fig. 2.

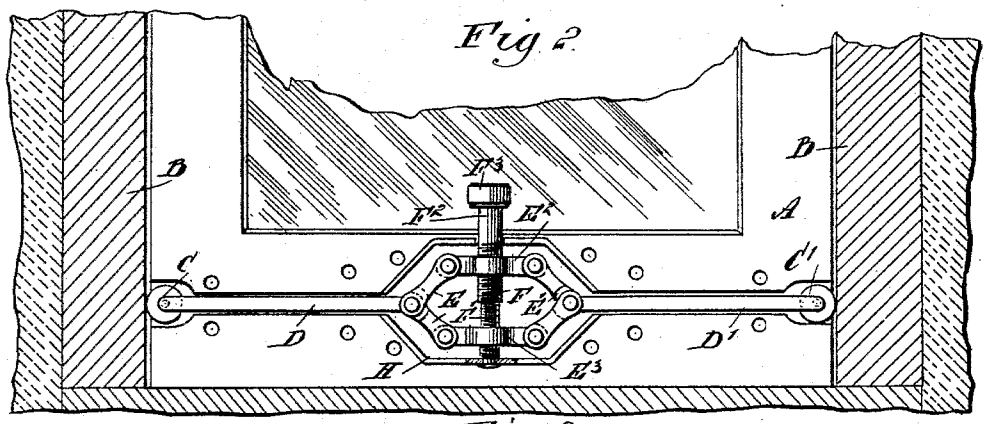


Fig. 3.

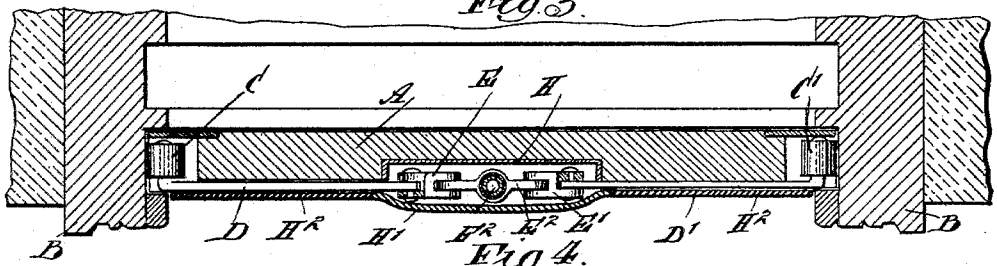
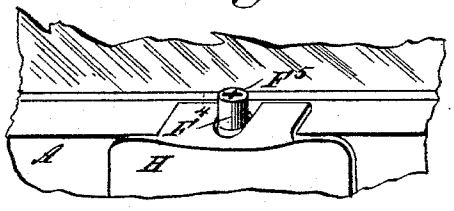


Fig. 4.



WITNESSES:

Paul Johns

Rud. J. Hoosten

INVENTOR

R. A. Haegelin.

BY

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RICHARD A. HAEGELIN, OF ST. JOSEPH, MISSOURI.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 589,653, dated September 7, 1897.

Application filed May 29, 1897. Serial No. 638,756. (No model.)

To all whom it may concern:

Be it known that I, RICHARD A. HAEGELIN, of St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and Improved Sash-Lock, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved sash-lock designed for use on windows of houses, railroad-cars, and the like, and which is simple and durable in construction and arranged to conveniently and securely lock the sash at the ends or intermediate points of its travel to prevent rattling of the sash and to support the same equally at both sides.

The invention consists principally of bolts adapted to engage with their free ends the window-frame, toggle-levers connected with the said bolts, and a device for opening and closing the said toggle-levers to move the said bolts from or toward each other and carry their free ends into or out of engagement with the window-frame.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement as applied. Fig. 2 is a similar view of the same with the covers removed. Fig. 3 is a sectional plan view of the same on the line 3 3 of Fig. 1, and Fig. 4 is a perspective view of a modified form of the screw-rod.

The improved sash-lock is preferably arranged on the lower cross-bar of the sash A, fitted to slide in the usual manner in suitable guideways arranged in the window frame or casing B. The latter is adapted to be engaged by friction-rollers C and C', journaled on the outer ends of bolts D and D', respectively, held to slide longitudinally in suitable recesses formed in the cross-bar of the sash A, as plainly indicated in Fig. 2. The inner ends of the bolts D and D' are pivotally connected with pairs of toggle-levers E E', connected with each other by links E^2 and E^3, formed with apertures having right and left hand screw-threads engaged by the corresponding screw-threads F and F', formed on a screw-rod F^2, mounted to turn at its lower end in the bottom of a casing H, set in the cross-bar of the sash and containing the said toggle-levers and screw-rod, as plainly indicated in Figs. 2 and 3. The casing H is closed by a cover H', and similar covers H^2 close the recesses in which the bolts D and D' operate. The upper end of the screw-rod F^2 extends through the top of the casing H and the flange of the cover H', and on the outer end of the said screw-rod is formed a handle in the shape of a knob F^3, adapted to be taken hold of by the operator to turn the said screw-rod, so as to move the links E^2 and E^3 simultaneously toward or from each other to move the bolts D and D' outward or inward and carry the friction-rollers C C' in and out of engagement with the window casing or frame B. Thus when the knob F^3 is turned in one direction the toggle-levers are opened to draw the bolts D and D' inward, and when the knob is turned in the opposite direction the toggle-levers are closed to push the bolts D D' outward, so as to engage the friction-rollers with the window-casing to lock the sash in place in whatever position it may be in, either at the ends of its travel or at intermediate points of said travel, as the case may be.

If desired, the knob F^3 can be dispensed with, and in this case the screw-rod F^4 is provided at its upper end with a recess F^5 for engagement by a suitable key carried by the operator for turning the screw-rod in the desired direction to lock or unlock the sash, as the case may be. Now it will be seen that by the arrangement described the friction-rollers C and C' can be moved with more or less force in contact with the window-casing to lock the sash in position, or on slightly releasing the pressure of the bolts the sash can be lowered at any desired rate of speed by its own gravity, and if the sash is to be raised the bolts D and D' are caused to move inward toward each other to completely move the friction-rollers out of engagement with the window-casing.

The device is very simple and durable in construction, is not liable to get out of order, as no springs or the like are employed and positive movement is given to the various parts.

It will also be seen that when the device is used on window-sashes for cars or the like all rattling is prevented and the sash is locked as above explained.

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

1. A sash-lock, comprising bolts carrying friction-rollers adapted to engage the window-frame, toggle-levers pivotally connected with the said bolts, and a screw-rod having right and left hand threads screwing in links of the said toggle-levers, to open and close the same on turning the screw-rod, substantially as shown and described.

2. The combination of two bolts, two toggle-levers respectively connected to the bolts and a differentially-threaded screw coacting with the toggle-levers whereby to throw or withdraw the bolts upon the operation of the screw.

RICHARD A. HAEGELIN.

Witnesses:
FRANK ERATH,
WILL. E. KRADER.