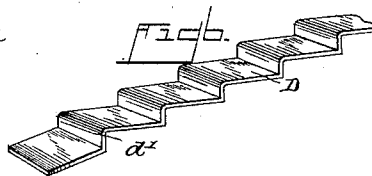
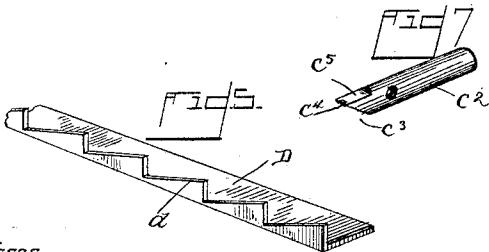
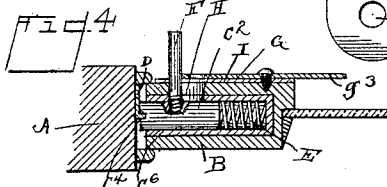
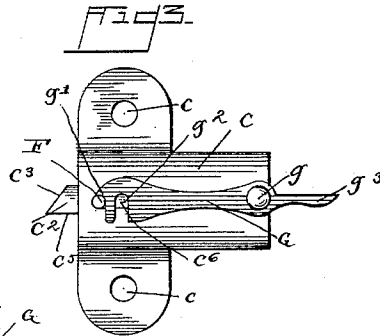
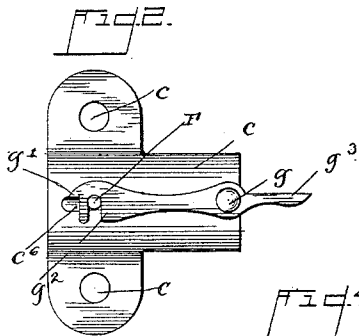
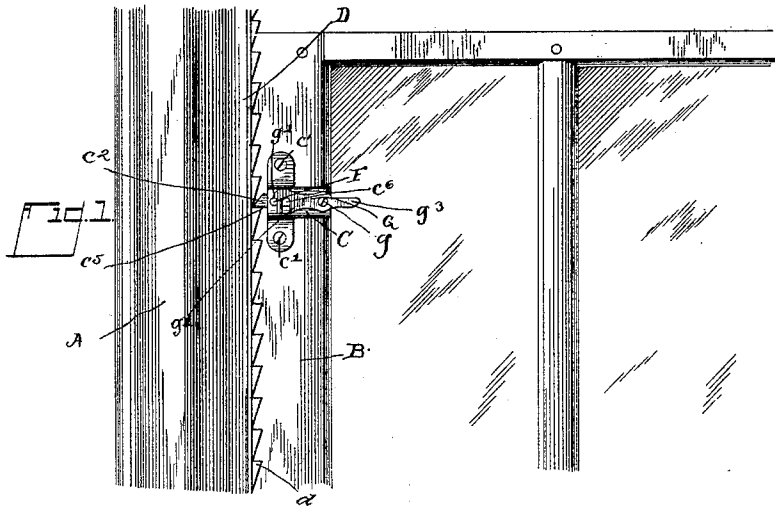


(No Model.)

W. S. JAMES.
SASH FASTENER.

No. 461,020.

Patented Oct. 13, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

WILL S. JAMES, OF FORT WORTH, TEXAS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 461,020, dated October 13, 1891.

Application filed April 22, 1891. Serial No. 389,938. (No model.)

To all whom it may concern:

Be it known that I, WILL S. JAMES, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Sash-Lock, of which the following is a specification.

My invention relates to an improvement in sash-fasteners; and it has for its object to provide a simple and inexpensive lock that can be readily adapted to any ordinary sash and window-frame, that will securely support the sash at any desired elevation and prevent either the upward or downward movement of the same until the lock is released, and that will be easily controlled and operated; and it consists of a ratchet-lock combined with a ratchet-bar and provided with details of construction hereinafter more fully described, illustrated in the accompanying drawings, and specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a front elevation of a window provided with my improved ratchet-lock. Fig. 2 is a detail in elevation of the lock, showing the bolt secured in its withdrawn position. Fig. 3 is a similar view with the bolt-lock in its normal position. Fig. 4 is a detail section of a portion of a sash having the lock placed within the sash-rail. Fig. 5 is a detail in perspective of the flange-tooth ratchet-bar. Figs. 6 and 7 are similar views of a modification of the rack-bar and of the locking-bolt respectively.

Referring to the accompanying drawings by letter, A designates the ordinary window-casing and B the sliding sash. Upon the side rail of the sash is secured a ratchet-lock C, provided on either side with the perforated lugs *c c*, through which the securing-screws *c'* pass and attach the lock to the sash. Lock C is constructed of suitable material and made in any desirable shape, but is preferably tubular, and is provided with a sliding bolt *c²*, that is normally pressed out against the ratchet-bar D, which is secured to the window-casing adjacent to the side rails of the sash by the spiral spring E within the barrel of the lock. Said ratchet-bar D is made of suitable metal and is provided with flange ratchet-teeth *d*, but may be constructed of other material and may be cast, cut, or cor-

rugated into shape, as shown in the modification in Fig. 6, in which the corrugations *d'* form the ratchet-teeth, and the bar may be also made from wood. The outer end of said sliding bolt is beveled at *c³* to insure its easy movement over the teeth of the ratchet-bar, while it is further provided on its end with a groove *c⁴*, of the same width as that of the ratchet-teeth, being adapted to pass over the same and steady the bolt and prevent lateral oscillations of the same, which is usual in spring-actuated bolts of this character, and at this end is also provided with a squared abutting side *c⁵*, that is adapted to rest flat on the ratchet-teeth when holding the sash. A pin F is screwed into the bolt near its beveled end and passes through a slot *c⁶* in the barrel of the lock, holding the said bolt to its place within the lock and at the same time furnishing means for locking the bolt either in its normal or withdrawn position.

On the inner end of the barrel of the lock a lever G is pivoted at *g*, and is provided at one end with a locking-shoulder *g'*, that is adapted to take behind the pin projecting through the lock-barrel from the bolt and lock the same in its normal position in engagement with the ratchet-bar, while said lever is further provided immediately back of said locking-shoulder with a notch *g²*, that is adapted to pass over said pin and hold the bolt out of engagement with the rack when desired, the opposite end of said lever slightly projecting beyond the point of pivot to form an operating portion *g³*.

When the lock is placed within the sash-rail, as shown in Fig. 4, the modification is slight. The sash is recessed to receive the barrel of the lock and is provided with a slot H and a correspondingly-slotted plate I, through which the pin F may work, and upon which is mounted the locking-lever G. The ratchet-bar in this modification is placed within the sash-groove.

According to the direction in which the sash is designed to be locked the ratchet-lock can be reversed by simply reversing the ratchet-bar on the window-casing, unscrewing the pin in the spring-actuated bolt, reversing the same without otherwise disturbing the lock, and thus changing the direction of the ratchet and of the lock.

The operation of the lock can be readily seen from the foregoing description. The spring-actuated bolt is adapted to run freely in one direction over the ratchet-bar and lock the sash at any elevation by coming into locking engagement with the ratchet-teeth of the rack-bar when the locking-lever is not used in connection with the same; but by means of this lever the bolt can be held locked in its normal position against the ratchet-teeth irrespective of the direction of the teeth and also is adapted to hold the bolt out of engagement with the same and permits the free movement of the sash either up or down.

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

1. In a sash-lock, the combination, with a ratchet-bar, of a spring-actuated bolt provided with a projecting pin, and of a locking-lever adapted to engage said pin and hold the bolt locked in its normal position against the teeth in the ratchet-bar and in its withdrawn and inoperative position out of engagement with said teeth, substantially as set forth.

2. In a sash-lock, the combination, with a ratchet-bar, of a spring-actuated bolt provided with a pin projecting through a slot in the lock-casing, and of a locking-lever pivoted to said casing and provided at one end with a locking-shoulder that is adapted to abut

against said pin and lock the bolt in its normal position against the teeth on the ratchet-bar and with a notch that is designed to pass over said pin and hold the bolt in its withdrawn and inoperative position out of engagement with said teeth, substantially as set forth.

3. In a sash-lock, the combination, with a ratchet-bar, of a spring-actuated bolt provided with a pin projecting through a slot in the lock-barrel, a beveled engaging face, a groove in said face that is adapted to pass over the teeth on said ratchet-bar, and a squared side that is adapted to form a locking-rest for the bolt, and of a locking-lever pivoted to said barrel and provided at one end with a locking-shoulder that is adapted to abut against the said pin and lock the bolt in its normal position against the teeth on the ratchet-bar and with a notch that is designed to pass over said pin and hold the bolt in its withdrawn and inoperative position, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILL S. JAMES.

Witnesses:

J. O. RAFFERTY,
I. W. LAKE.