

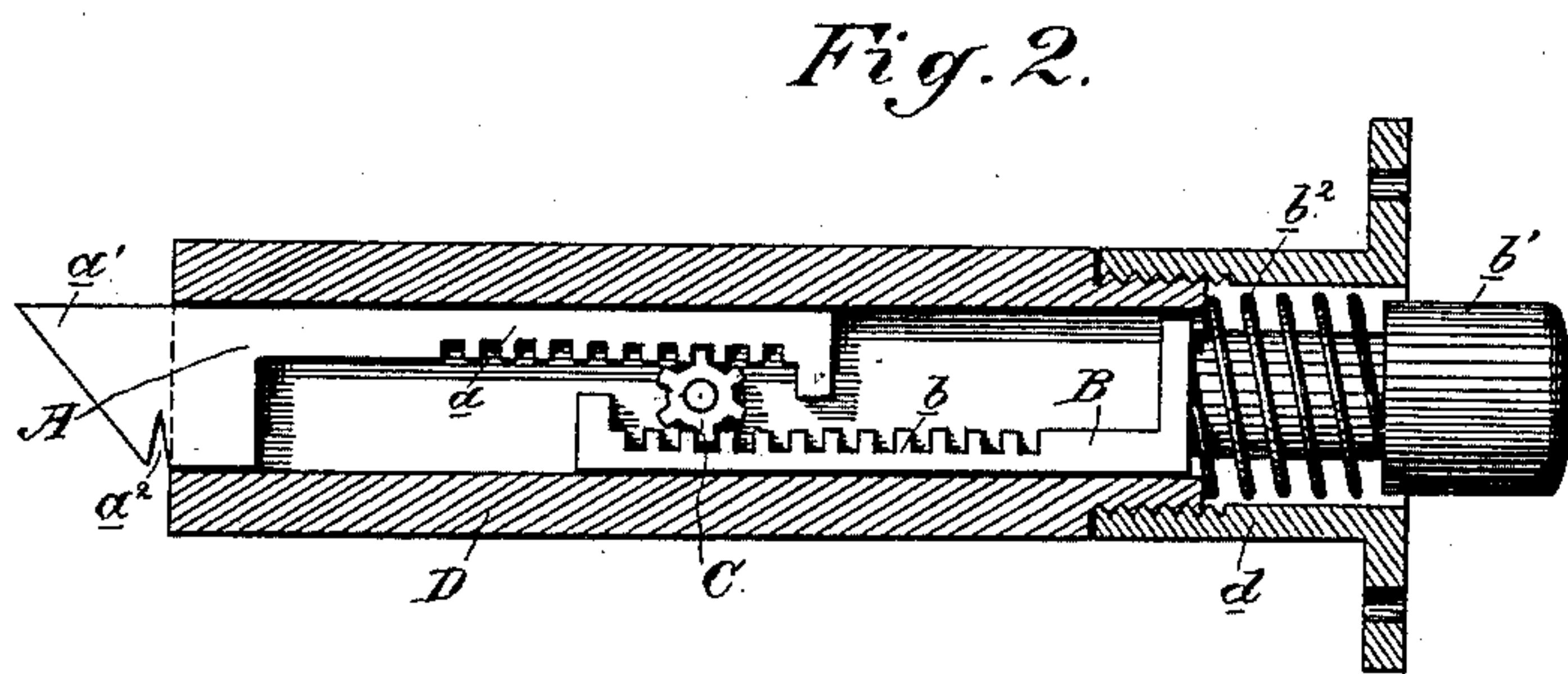
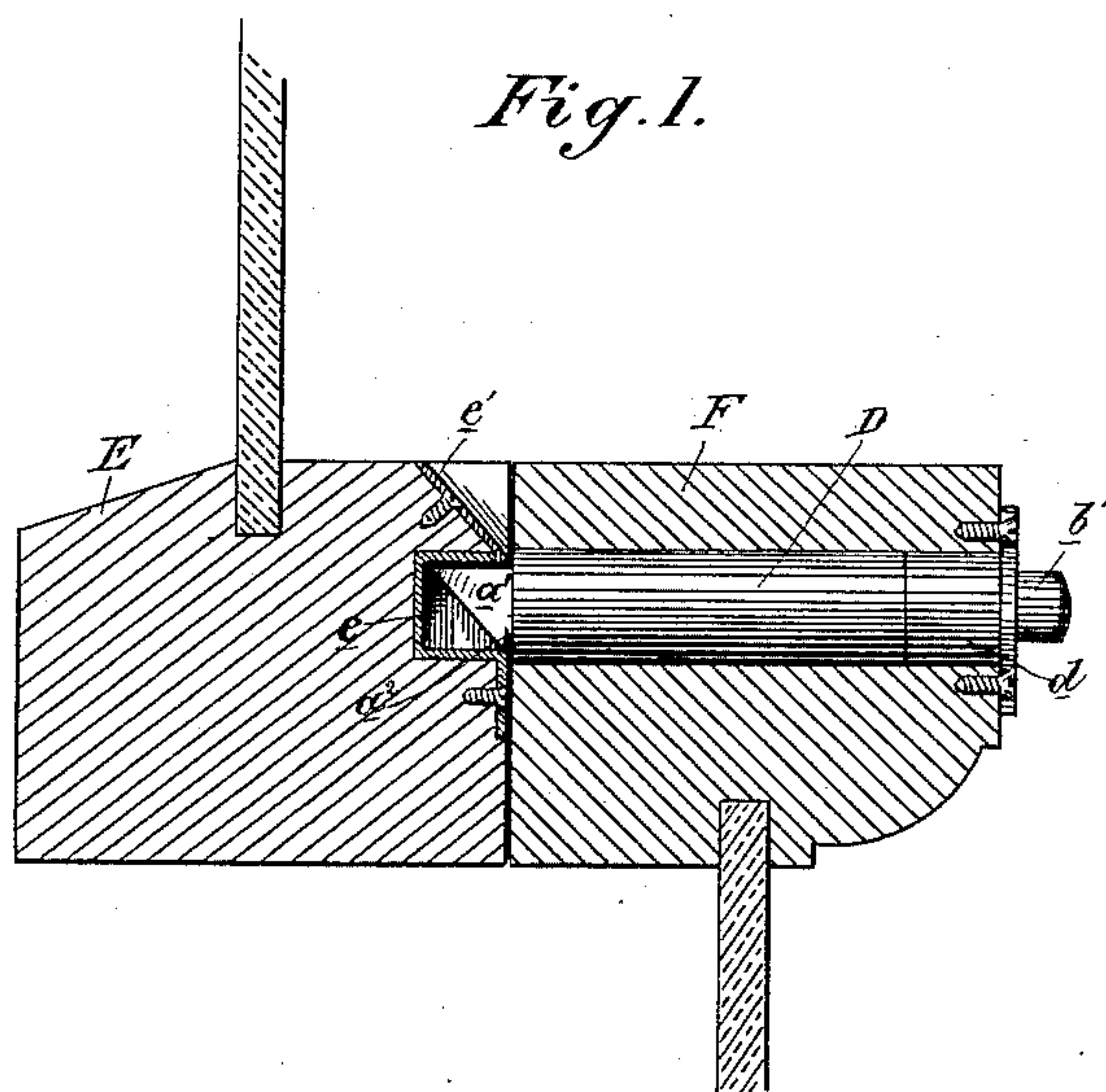
(No Model.)

E. SHERWOOD.

SASH FASTENER.

No. 359,183.

Patented Mar. 8, 1887.



Witnesses,
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UNITED STATES PATENT OFFICE.

EUGENE SHERWOOD, OF SAN FRANCISCO, CALIFORNIA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 359,183, dated March 8, 1887.

Application filed December 1, 1886. Serial No. 220,413. (No model.)

To all whom it may concern:

Be it known that I, EUGENE SHERWOOD, of the city and county of San Francisco, and State of California, have invented an Improvement in Sash-Locks; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the class of locks or fastenings applied to the sashes of windows for the purpose of securing them, whereby they cannot be opened from without, thus preventing an unlawful entry.

My invention consists in a bolt seated in one sash and adapted to engage the other, said bolt having a rack-stem, an operating-pin, also seated in the first sash and influenced by a spring, said pin having a rack-stem, and a pinion engaged on opposite sides by the rack-stems of both bolt and pin, whereby the movement of the latter effects a reverse or opposite movement of the former. These main features of my invention, together with details of construction and arrangement, I shall hereinafter more fully describe.

The object of my invention is to provide a simple and effective sash-lock—one which accomplishes its locking automatically, which can be readily released from within, and which will resist all tampering from without.

Referring to the accompanying drawings, Figure 1 is a vertical cross-section through the meeting-rails of the two sashes, showing the application of my lock thereto. Fig. 2 is a longitudinal section of the casing D, showing the internal mechanism of the lock.

A is the bolt, having a rack-stem, a , and a head, a' . B is the operating-pin, having a rack-stem, b , a head or button, b' , and a controlling-spring, b^2 . C is a centrally-pivoted pinion meshing on opposite sides with the rack-stems a and b . These parts are mounted in a casing, D, in such a manner that the head a' of the bolt projects from one end. The button b' of the pin projects from the other end. The spring b^2 is seated between the inner shoulder of the button b' and a shoulder in the casing, and the pinion is pivoted in the casing between the two rack-stems.

It will be seen that the effect of the spring b^2 is to hold the bolt and pin projected from each end. Now, if the button b' be pressed in, the motion transmitted through the two rack-

stems and the intervening pinion will cause the retraction of the head a' of the bolt. Upon relieving the button from pressure the spring will at once project it, and thus effect the projection of the head of the bolt.

The application of the lock is thus: E is the meeting-rail of the upper window-sash, and F is the meeting-rail of the lower window-sash. The casing D, with its internal mechanism, is let transversely through the meeting-rail of the lower sash at some point in its length, preferably midway. The button end is on the inside, while the bolt-head end is adjacent to the meeting-rail of the upper sash, into a socket in which it fits. This socket e is a metal plate let into the meeting-rail E and secured by screws. It has also an upper beveled portion, e' , to receive the contact of and to guide the head a' of the bolt in coming to its engagement, the said head being also beveled, after the manner of an ordinary lock-latch. The casing D is secured to its place by means of screws through the wings of a cap-piece, d , formed either separate from or integral with the casing. In the under side of the bolt-head is made a small notch, a^2 , which, when the bolt is in position, lies just above the space between the meeting-rails of the sashes. This notch is for the purpose of receiving an instrument passed up between the two rails with intent to force the bolt back, and it avoids this result by preventing the movement of the instrument either way and guarding the beveled surface of the bolt-head.

The operation of my sash-lock is as follows: Whenever the two sashes are brought to their closed position the bolt-head a' engages the socket e automatically. The advantage of this is that the lock is effective without calling for the exercise of the least attention on the part of the person closing the window. This avoids the sometimes serious result of the carelessness of domestics. In order to open the window, the button b' is pressed in, whereby the bolt-head a' is withdrawn from its engagement with the socket e . The advantage of this reverse movement of the bolt and pin is that the required inward movement of the pin, effected by pressure on its button-head, is the most natural one. Buttons are usually arranged to be pressed inwardly, and this is the most convenient way of operating

them, the pressure being instinctively resorted to. It would be most awkward to draw the bolt directly back; but in this construction there is also the advantage of a gain in applying the power through the racks and pinion, thus rendering the lock easy of operation. The socket *e*, being formed of a metal plate, effectually prevents the passage through the rail *E* from the outside of a gimlet inserted with the intention of forcing the bolt back, and the beveled head *a'* of the bolt, being guarded by the notch *a*², presents no bearing for an instrument inserted from below between the meeting-rails.

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

1. In a sash-lock, the combination of a bolt seated in one sash and adapted to engage the other, said bolt having a rack-stem, a spring-actuated pin seated in the same sash and ac-

cessible from within, said pin having a rack-stem, and a pinion engaging with opposite sides of the two rack-stems, whereby the movement of the pin in one direction effects a reverse movement of the bolt, substantially as described. 25

2. In a sash-lock, the spring-actuated bolt in the meeting-rail of one sash controllable from within, said bolt having a beveled head, *a'*, with a notch, *a*², in its under surface, in combination with the socket-plate *e* in the meeting-rail of the other sash, with which the bolt-head engages, substantially as and for the purpose herein described. 30

In witness whereof I have hereunto set my hand. 35

EUGENE SHERWOOD.

Witnesses:

JAMES L. KING,
WM. F. BOOTH.