No. 651,464. Patented June 12, 1900.

G. E. LINT.

SASH LOCK.

(No Model.) (Application filed Mar. 10, 1900.)

Fig. 1.

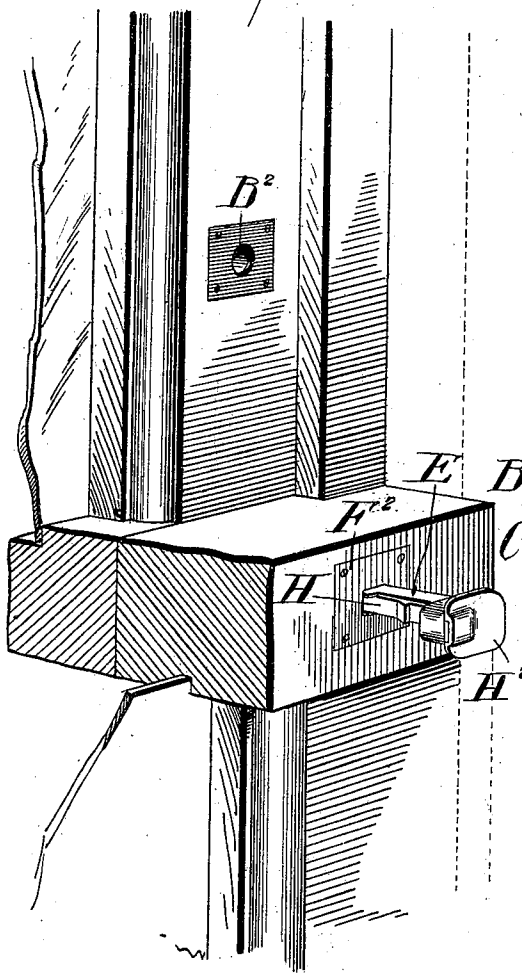


Fig. 2.

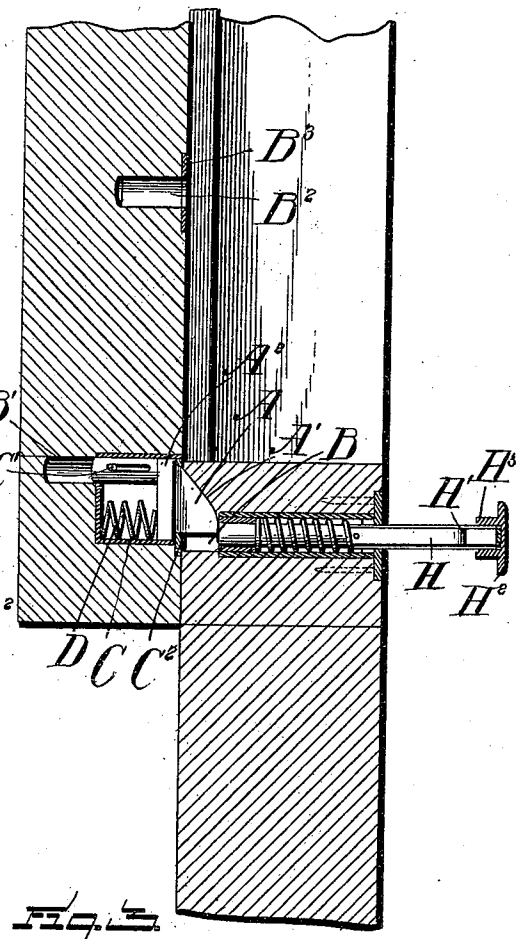


Fig. 4.

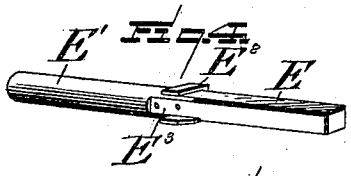


Fig. 5.

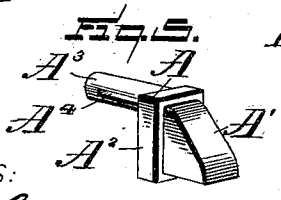
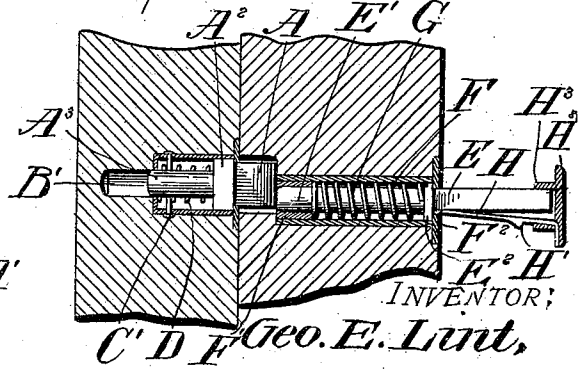


Fig. 3.



WITNESSES:

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GEORGE E. LINT, OF YORK, PENNSYLVANIA.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 651,464, dated June 12, 1900.

Application filed March 10, 1900. Serial No. 8,207. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. LINT, a citizen of the United States, residing at York, in the county of York, State of Pennsylvania, 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 sash-locks, and particularly to an automatic device by which the sash may be locked when lowered or by which it may be secured in a locked condition in a partially-elevated position.

One object of the invention is to provide an improved construction of push or locking pin by means of which the latch may be retracted from its locked position or the pin may coöperate with suitable sockets to hold the window in the desired position.

Other objects and advantages of the invention will hereinafter appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective of a window with the lock applied thereto. Fig. 2 is a vertical section. Fig. 3 is a horizontal section of the same. Fig. 4 is a detail perspective of the locking-pin, and Fig. 5 is a similar view of the latch.

Like letters of reference indicate like parts throughout the several figures of the drawings.

In the drawings the letter A indicates a latch having a beveled face A′, adapted to contact with the adjoining sash, and thus depress the latch until the same reaches the locking-recess B in the adjoining sash, and this automatically secures the two sashes together. This latch is located within a casing C and is provided with a flange A^2, which snugly fits the casing and prevents any turning or torsional movement of the latch in its reciprocations and always guides the same. The latch is also provided with a guide-pin A^3, extending backward into a recess B′ at the rear of the casing C. This guide-pin is provided with a slot A^4, through which a pin C′ is passed and secured to the casing C, which limits the extent of reciprocation of the latch and also prevents the accidental removal of the same from the casing C. This casing is also provided with a suitable face-plate C^2, against which the flange A^2 abuts in the outward movement of the latch. It will be seen that if pressure be applied to the inclined or beveled face A′ of the latch the tendency would be to cause a torsional movement of the latch in its rearward travel. This is effectually prevented and the latch balanced by means of a spring D, located in the casing between the flange A^2 and the rear wall of the casing, thus placing the tension upon the latch at the point which the greatest strain is applied in the backward movement of the latch by contact with an adjoining sash.

For the purpose of retracting or pushing inward the latch when it be desired to move the sashes I have provided a push or lock pin E, which is contained within a casing F, set in one of the sashes. The inner end or collar F′ of this casing F is circular and is adapted to receive the end E′ of the pin E, the opposite end thereof being of angular form, as shown at Fig. 4, and adapted to pass through an angular recess in a face-plate F^2. An angular flange E^2 is also provided upon the pin E, which fits within the angular walls of the casing F, thus guiding and holding against frictional contact the pin E. This pin is normally projected outwardly in a position shown in Figs. 2 and 3 by means of a torsion-spring G, extending between the flange E^2 upon the pin and the circular collar F′ within the casing. It will be seen that an inward movement of the pin E will force the latch A into its casing and permit the sashes to move past each other. For the purpose of locking this pin in its inward position when the spring G is under tension I have provided a spring-catch composed of a leaf or flat spring H, having a locking-tooth H′, adapted to engage the face-plate F^2, through which the pin E passes. This spring is attached to one of the flat or angular faces of the pin E, for instance as at E^3, and has secured to its outer or free end a cap H^2. This cap has an inwardly-extending collar H^3, which surrounds the outer end of the pin E, and thus limits the lateral movement thereof and of the spring H. It is understood that the cap H^2 is entirely independent from the pin E and carried solely by the free end of the spring H. This permits the spring to be moved to disengage it from contact with

the face-plate F^2 at any time. This form of lock-pin is adapted for use in retracting the latch A and when locked in its inward position for preventing the action of said latch in the recess B if it be desired to throw the automatic latch out of operation. The pin is also adapted for use in securing the sashes in different relative positions. For instance, one of the sashes may be provided at different points with recesses or sockets B^2, having a suitable face-plate B^3, and the end E′ of the lock-pin may be projected into this socket and there retained by means of the spring-catch H, thus locking the catches together in any desired relation.

The operation of the several parts will be apparent from the foregoing description, from which it will be seen that the latch A will under normal conditions automatically engage the recess B in the lower sash, and thus secure the two meeting-rails together and lock the window when shut. It will also be observed that the push or lock pin hereinbefore described is capable of operation to retract this latch and hold the same out of operation and has the further function of cooperating with the sockets to hold the sashes in any desired relation for the purpose of ventilation or otherwise. The several parts of the locking devices are formed in such a manner that they can be readily applied to any ordinary form of sash now in use by simply forming the necessary apertures and recesses therein to receive the two casings, which carry, respectively, the latch and the push or locking pin.

It will be obvious that changes may be made in the details of construction and configuration of the several parts without departing from the spirit of the invention as defined by the appended claims.

Having described my invention, what I claim is—

1. In a sash-lock, a push and lock pin, a casing therefor, a tension-spring to normally force said pin in one direction, a locking-spring secured at one end to said pin and provided at its opposite end with a locking-tooth to hold the pin in position when the tension-spring is compressed, and means carried by the free end of said locking-spring and embracing said pin to limit the lateral movement of said spring; substantially as specified.

2. In a sash-lock, a push and locking pin, a casing therefor, a spring to force said pin in one direction, a spring-catch composed of a spring secured to said pin and having a tooth thereon, a cap carried by said spring independently of the pin, and a sleeve to said cap surrounding the outer end of said pin; substantially as specified.

3. In a sash-lock, a push and lock pin comprising an angular portion, a circular portion, and an intermediate flange portion, a casing for said pin adapted to fit said flange portion and having an angular portion at one end, a spring for projecting said pin in one direction, a spring-catch secured to said pin at one end and provided with a tooth adapted to engage a portion of said casing, and a cap secured to the free end of said spring-catch and provided with an inwardly-extending collar surrounding the end of said pin; substantially as specified.

4. In a sash-lock, the combination with adjacent sashes, of a spring-latch carried by one sash and adapted to enter a recess in the adjacent sash, a push-pin located at said recess and adapted to operate against said spring-latch, a spring-catch adapted to hold said pin in its inward position, and a socket carried by the sash containing the latch into which socket said push-pin is adapted to enter when the meeting-rails of the sashes are not in alinement; substantially as specified.

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

GEORGE E. LINT.

Witnesses:
GEO. E. BRILLINGER,
CHAS. LICHTENBERGER.