No. 783,373. PATENTED FEB. 21, 1905.

I. G. FRENCH.

SASH LOCK.

APPLICATION FILED OCT. 23, 1903. RENEWED JAN. 21, 1905.

Fig. 1.

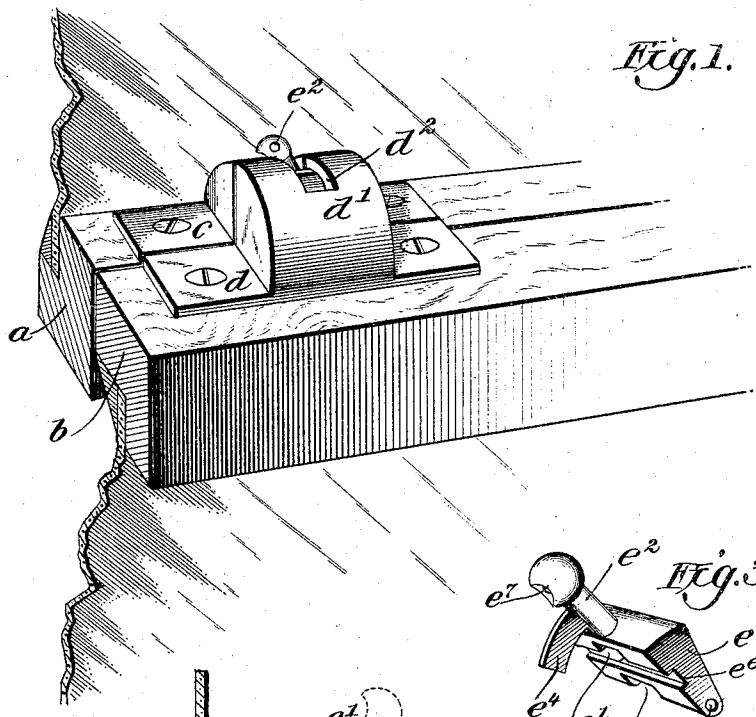


Fig. 3.

Fig. 4.

Fig. 2.

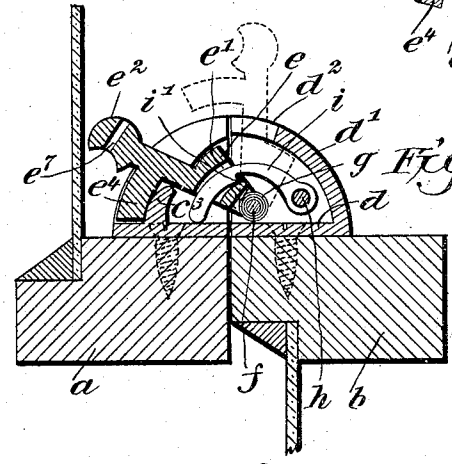
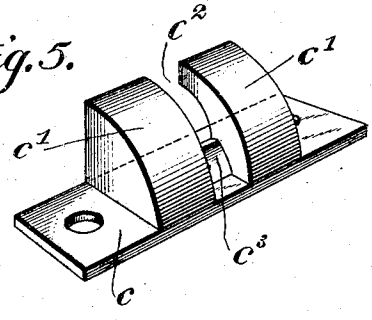


Fig. 5.



WITNESSES:

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No. 783,373. Patented February 21, 1905.

UNITED STATES PATENT OFFICE.

IRA GATES FRENCH, OF ORANGE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CHRISTOPHER W. COLLIER AND CHARLES A. PIKE, OF ORANGE, MASSACHUSETTS.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 783,373, dated February 21, 1905.

Application filed October 23, 1903. Renewed January 21, 1905. Serial No. 242,108.

To all whom it may concern:

Be it known that I, IRA GATES FRENCH, a citizen of the United States, and a resident of Orange, in the county of Franklin and State of Massachusetts, have invented a new and Improved Sash-Lock, of which the following is a full, clear, and exact description.

This invention relates to a window-sash lock adapted to be applied to the meeting-rails of the sashes and of such construction that it will automatically lock the sashes as they are moved into closed position.

The invention resides in certain novel features of construction and arrangement of parts, as will be hereinafter fully set forth.

This specification is an exact description of one example of my invention, while the claims define the actual scope thereof.

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 views.

Figure 1 is a perspective view of the invention, showing it in use. Fig. 2 is a cross-section thereof. Fig. 3 is a detail perspective view of the locking-dog. Fig. 4 is a detail perspective view of the pawl, and Fig. 5 is a detail perspective view of the keeper.

a indicates the meeting-rail of the top sash, and *b* the meeting-rail of the bottom sash. To the rail *a* is applied a keeper which comprises a base-plate *c*, curved walls *c'* passing from the outer edge of the base-plate upward and inward and spaced from each other to form a passage c^2, at the lower end of which is a curved rib or bead c^3, the purpose of which will be fully explained hereinafter. The body member of the lock is applied to the rail *b* of the lower sash and comprises a base-plate *d* and a case *d'*, the outer wall of which curves upward and inward toward the upper end of the keeper-walls *c'* and is formed with a notch d^2 to receive the dog when the same is in the inactive position indicated by the broken lines in Fig. 2. The dog, as best shown in Fig. 3, comprises the dog proper or body *e*, formed with a transverse opening *e'* therein and having a finger-piece e^2 projected from its free edge. Said finger-piece carries a curved arm e^4. The dog is mounted in the body of the lock on a transverse pin *f*, which is passed through openings e^5 in the bottom edge of the dog, as best shown in Fig. 3. The bottom portion of the dog is formed with a notch e^8, and this receives a coil or other spring *g*, arranged to throw the dog down into the active position indicated by the full lines in Fig. 2. The dog *e* has a transverse groove e^6 in its under face, which is intended to catch a knife-blade or the like that may be used in the attempt to open the sash-lock by forcing the blade up between the sashes. This groove catches the blade and prevents fraudulently opening the window. e^7 represents an opening in the finger-piece e^2, in which to fasten a cord or its equivalent to facilitate the operation of the lock.

Mounted on a pin *h* within the body of the lock is a pawl *i*, which is arc-shaped and formed with a shoulder *i'*. This pawl is passed through the opening *e'* in the dog *e*, and its shoulder *i'* is adapted to engage the front wall of the dog when the dog is in vertical position, thus holding the dog inactive.

In the operation of the device when the parts are in the position shown in Fig. 2 the two sashes are locked together, since the dog *e* when thrown downward passes under the curved walls *c'* of the keeper, and it will be impossible relatively to move the sashes without disengaging the dog from the said walls of the keeper; also, the arm e^4, riding over the curved rib or bead c^3, draws together the two parts of the lock and the sashes to which they are attached, thus preventing a relatively sidewise movement of the sashes and the rattling noise incident thereto. In order to release the lock, it is only necessary to grasp the finger-piece e^2 of the dog and throw the same upward, as indicated by the broken lines in Fig. 2. The shoulder *i'* of the pawl *i* will now engage the front wall of the dog and hold the dog inactive. The sashes may then be moved freely. The instant, however, the meeting-rails *a* and *b* are brought into alinement the pawl *i* strikes the base-plate of the keeper and is thrown upward sufficiently to

disengage the shoulder *i'* from the dog *e*, and the dog, assisted by the spring *g*, is instantly thrown down into the locked position illustrated by the full lines in Fig. 2.

The lock may be applied to the sides of the sash, as well as in the position shown, and when applied to the sides of the sash it may be made to lock the sashes partly open. In this case the attaching-flanges will stand vertically on one end of the body member and keeper instead of on the bottoms thereof.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claims.

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

1. In a sash-lock, the combination of a keeper and a swinging dog coacting therewith, the dog having a plane surface, and a transverse cavity intermediate the ends of the said plane surface serving to receive and arrest an instrument moved against the dog to operate it.

2. The combination of a keeper, a body, an orificed dog mounted to swing on the body and adapted to engage the keeper, and a pawl curved concentric to the axis of the swinging movement of the dog and fitting loosely in the orifice of the dog, the pawl having a shoulder coacting with the dog.

3. The combination of a keeper, an orificed dog movable into and out of engagement therewith, and a pawl projecting loosely through the orifice in the dog.

4. The combination of a keeper, an orificed dog movable into and out of engagement therewith, and a pawl projecting loosely through the orifice in the dog, said pawl projecting laterally beyond the dog into position to engage the keeper, whereby to disengage the pawl from the dog.

5. A sash-lock, comprising a keeper having a passage therein and a bead at one end of the passage, a body, a dog pivoted on the body and movable into the keeper to lock the sash, said dog having a part movable through the passage in the keeper, and a curved arm adapted to engage the said bead when the dog is in locked position.

6. A sash-lock, comprising a keeper having a passage therein and a bead at one end of the passage, a body, a dog pivoted on the body and movable into the keeper to lock the sash, said dog having a part movable through the passage in the keeper, a curved arm adapted to engage the said bead when the dog is in locked position, a spring serving to throw the dog into active position, and a releasable means for holding the dog in inactive position.

7. A sash-lock, comprising an overhanging keeper, and a pivoted dog adapted to swing into the keeper and engaged with the interior walls thereof, whereby to lock the sash, said dog having a part projected beyond the keeper to facilitate the manipulation of the dog.

8. A sash-lock, comprising an overhanging keeper having a passage therein, and a pivoted dog adapted to move into the keeper, said dog being constructed to engage with the inner surface of said keeper, on either side of said passage.

9. A sash-lock, comprising an overhanging keeper provided with a vertical passage having a bead at the base thereof, a dog mounted to swing beneath the keeper, and provided with an arm to engage the bead, said dog being constructed to engage with the inner surface of said keeper on either side of said passage.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

IRA GATES FRENCH.

Witnesses:
ERASTUS ASH,
STEPHEN FRENCH.