(No Model.)

C. T. REDFIELD.

SASH LOCK.

No. 588,473. Patented Aug. 17, 1897.

Fig. 1.

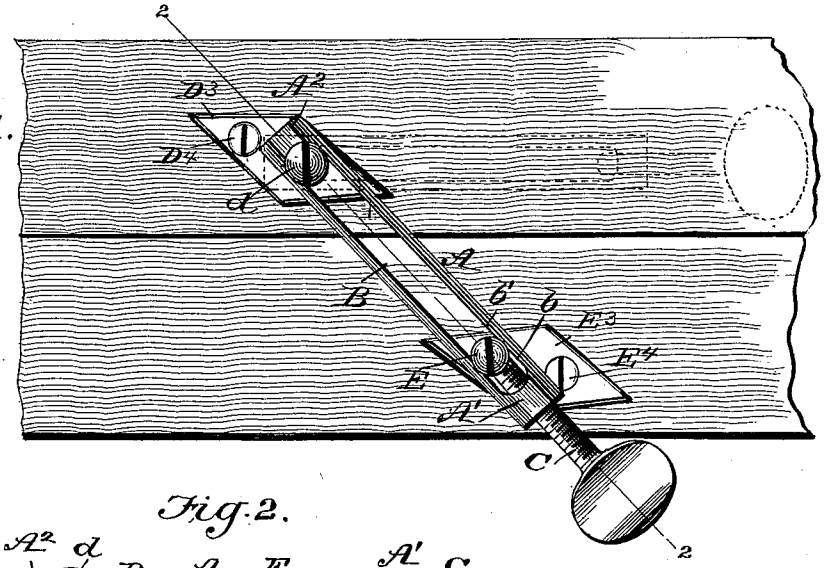


Fig. 2.

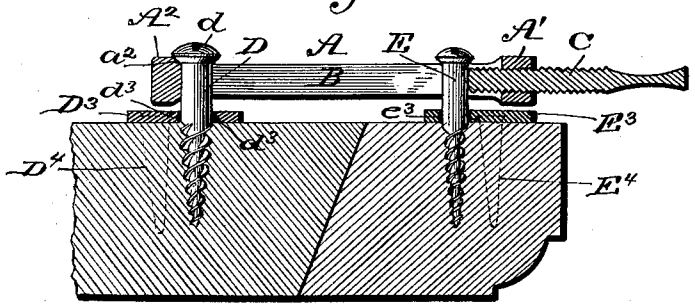


Fig. 4.

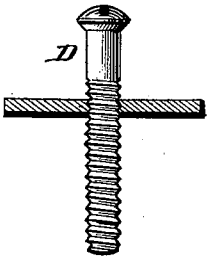
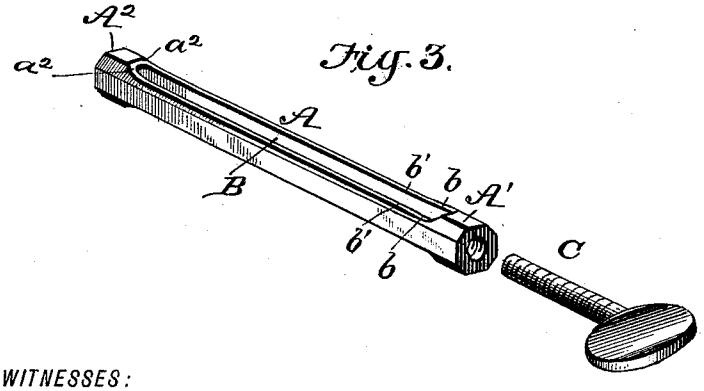


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES T. REDFIELD, OF GLEN HAVEN, NEW YORK.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 588,473, dated August 17, 1897.

Application filed February 13, 1897. Serial No. 623,238. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. REDFIELD, residing at Glen Haven, in the county of Cayuga and State of New York, have invented a new and useful Improvement in Sash-Locks, of which the following is a specification.

My invention is an improvement in sash-locks, and seeks to provide a lock which will efficiently secure the meeting-rails of the sashes together by an action somewhat similar to a parallel-ruler action by drawing the meeting-rails both together and alongside each other in such manner as to bind them both together at their meeting sides and also to force them at their opposite ends against the opposite sides of the window-frame, thus serving a twofold purpose by securing the said rails tightly together and also securing them when so held together tightly in the window-frame.

The invention has for further objects other improvements; and it consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a top plan view of my improvements. Fig. 2 is a section on about line 2 2 of Fig. 1. Fig. 3 is a detail perspective view, and Fig. 4 shows a modification.

In carrying out my invention I employ a link A, which is slotted longitudinally at B, such slot extending nearly to its opposite ends, but being closed by the ends of the link at A′ and A^2, as shown. At one end A′ the link is provided with a longitudinally-extended threaded opening, in which the fastening-screw C operates. Near this end A′ of the link the slot B is widened at *b* and is contracted at *b′* adjacent to this widened portion, the purposes of which widened and contracted portions will be presently described. The end A^2 of the link is tapered or sloped at a^2 to engage with the tapered under side of the head *d* of the securing-stud D. This securing-stud D is in practice fixed to the lower or meeting rail of the upper sash, and an abutment-stud E is secured upon the upper or meeting rail of the lower sash. These studs D and E are not arranged directly opposite each other, but are diagonally disposed with respect to the direction of length of the meeting-rails in such manner that if a strain be exerted longitudinally between the studs D and E to draw the same together it will operate to cause the meeting-rails to slide upon or along each other, being at the same time pressed tightly together, as will be understood from Fig. 1.

The head *d* of the stud D is made larger than the slot B of the link, so such stud will operate as a permanent fastening for the link. On its under side the head *d* is beveled or sloped, and such slope is engaged by the end A^2 of the link A, so that the said link may be swung up and down on the stud and will also operate if the meeting-rails of the upper and lower sashes are not in exact alinement and will serve in a measure to force the upper sash up and the lower sash down to bring the meeting-rails into proper alinement, such end being also aided by the engagement of the fastening-screw C with the beveled under side of the head of the stud E when tension is applied by turning up the said screw.

In securing the studs D and E it is preferred to pass them down through openings d^3 and e^3 in base-plates D^3 and E^3, such base-plates resting firmly upon the meeting-rails and secured, if desired, by means of supplemental screws D^4 and E^4, thus furnishing a strong foundation for the studs. Where desired, however, the supplemental screws D^4 and E^4 may be omitted and the studs D and E be threaded through the base-plates and then screwed into the wood of the meeting-rails, as will be understood from Fig. 4. In this construction the stud is held by its anchorage in the meeting-rail and is braced by the broad bearing of the base-plate against such meeting-rail, but it may be preferred in some instances to employ the supplemental screws D^4 and E^4, because of the greater strength given thereby.

In operation the link is held at its end A^2 on the securing-stud D and may be swung longitudinally and laterally on said stud, as well as moved longitudinally along the same and lifted to set it on and off the abutment-stud E, the widened portion of the slot B permitting the link to slip over the head of the abutment-stud. The fastening-screw may now be turned to bear against the stud E, and as the said screw is tightened up it will draw the link along the stud E to bring the head

of the latter over the narrow or contracted portion of the slot B, so the side arms of such link will engage under the head of the stud E, the point of the screw being also engaged under the head of the stud E, as shown. This operation draws the sashes tightly together and binds them within the frame, as before described, and the link is held in engagement with the abutment-stud both by the bearing of the fastening-screw under the head of said stud and by the fitting of the side arms of the link under such head so the link cannot by any possibility be forced off the stud E until the fastening-screw is released.

It is manifest the lock may be applied to sashes which are badly fitted or warped out of shape or in which the building has settled and will operate efficiently in any case. Where desired, the studs and base-plates may be integral and the base-plate secured by a single screw for an economical construction.

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

1. A sash-lock comprising a slotted link, a securing-stud on which said link may be held and along which the same may be slid longitudinally and upon which the link may be swung laterally, an abutment-stud over which the link may be applied and removed by down-and-up movements and a screw threaded in the link and bearing against the abutment-stud, substantially as shown and described.

2. A sash-lock comprising the base-plates, the studs passed through said plates and adapted to enter the sash-rails and the connecting-link engaging said studs above the said base-plates substantially as shown and described.

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