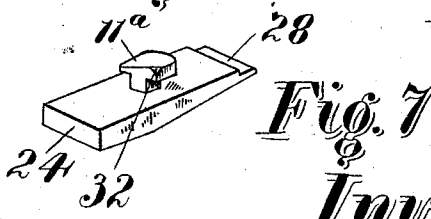
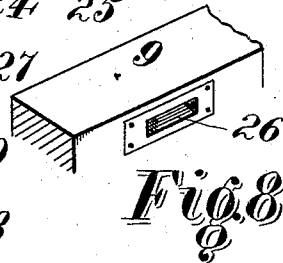
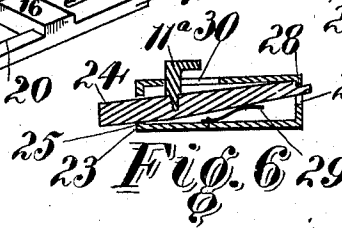
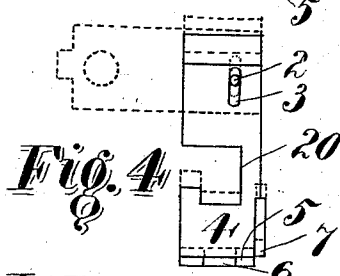
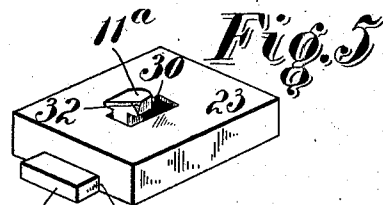
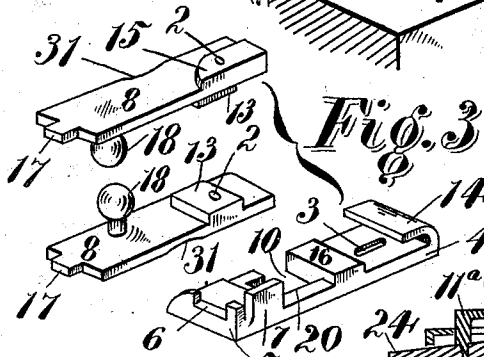
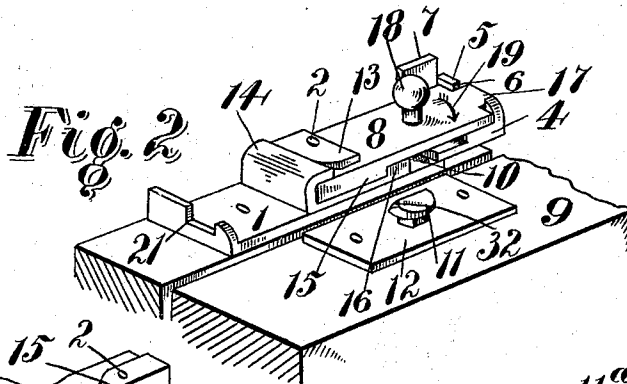
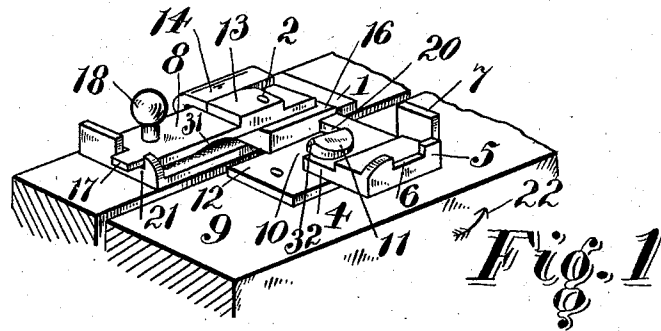


(No Model.)

W. H. DEAN.
FASTENER FOR MEETING RAILS OF SASHES.

No. 542,555.

Patented July 9, 1895.



Witnesses.

J. A. Vance.
W. H. Dean

Inventor.
Wm. H. Dean
by Atty's Kincaid & Co.

UNITED STATES PATENT OFFICE.

WILLIAM H. DEAN, OF WEST BERKELEY, CALIFORNIA.

FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 542,555, dated July 9, 1895.

Application filed January 24, 1895. Serial No. 536,130. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DEAN, a citizen of the United States, residing at West Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Sash-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to manufacture and use the same.

This invention relates to useful improvements in sash-locks of that class in which provision is made for the locking together of the meeting-rails of sashes when the window is in a closed position.

The present invention has for its objects, among others, to provide an improved construction that is simple and effective and can be easily and readily applied and operated. The parts are so arranged as to be readily assembled, not liable to derangement, and positive in their action. The lock is especially designed for its security and its structural economy.

Other objects and advantages of the invention will appear in the following specification and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, in which—

Figure 1 is a perspective view of my improved lock in a locked position. Fig. 2 is a similar view showing the lock open. Figs. 3 and 4 are details. Figs. 5, 6, 7, and 8 are detail views of a modified form of lock used in connection with my invention.

Like numerals of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by numbers, 1 indicates a supporting-plate secured to the lower rail of the upper sash. A pin 2 projects upward from this plate and engages a longitudinal slot 3 of a latch or lock 4. The latch 4 is provided at its outer end with a flange 5, in which is formed a cut-out portion 6. At right angles to the flange 5 and extending upward from the latch 4 is the lug 7, which forms a bearing-surface for the lever 8 to throw the latch 4 out of the

way of the lower sash 9. The other or rear end of the latch 4 is turned upward and back to form a partial housing for the rear end of the lever 8, and for another purpose which will be explained hereinafter. Near the outer end of the latch 4 is an L-shaped slot 10, which is adapted to engage the tapered headed lug 11 formed on a plate 12 secured to the upper rail of the lower sash 9.

The lever 8 is pivoted to the pin 2 directly over the latch 4. On the upper surface of this lever 8 is a cam 13, which is adapted to engage and rest against the inner edge of the turned-over portion 14 of the latch 4, while on the lower surface of lever 8 is formed a second cam 15, which engages with the projection 16 on the latch 4. The outer end of the lever 8 is formed with the contracted portion 17 to correspond and engage with the cut-away portion 6 on the latch 4. A knob 18 is provided to operate the lever 8.

The operation of my device is as follows: To lock the upper and lower sash together, the parts having been positioned as shown in Fig. 2 by the operation of unlocking, the lever 8 is operated in the direction of the arrow 19. When the lever and latch 4 have been turned far enough for the edge 20 of the slot 10 to engage the lug 11 the lever 8, having come in contact with the upper inclined surface of the lug 11, is thereby raised slightly, so as to pass the cut-out portion 6, and then it is continued on its pivot until it is at right angles to the latch 4, as shown in Fig. 1. From the time the lever 8 is turned independently of the latch 4 the cam 13 engages the turned-over portion 14, thus forcing the latch back against the window, the slot 10 permitting said latch to move on the pin 2. It will be readily seen that in this position it is impossible to revolve the latch in either direction without first moving it forward until the lug 11 is disengaged from the longitudinal leg of the slot 10. The lever 8 is held in the position shown in Fig. 1 by the cut-out stop 21.

To unlock the device the lever 8 is raised out of cut-out stop 21 and the operation reversed. The cam 15 engages with the projection 16 on the latch 4, forcing the same forward and out of engagement of the headed lug 11. At the same time the beveled portion 31 of the lever 8 encounters the beveled corner 32 of the lug

11 when it is raised and the projection 17 enters the cut-out portion 6. The lever 8 and latch 4 are now practically one, and they are turned on the pivot 2 in the direction of the arrow 22 until they assume the position shown in Fig. 2. Thus the lower sash is now free to be raised or the upper sash to be lowered.

In Figs. 5, 6, and 7 is shown a spring-lock, which is applied to the upper rail of the lower sash in place of the plate 12 and headed lug 11, the lug 11^a taking the place and doing the same work in relation to the remaining parts of the lock described above as the stationary lug 11. It comprises a casing 23, having therein a spring-pressed bolt 24. This bolt 24 works in an opening 25 in the front of the casing 23 and engages with a corresponding opening 26 in the lower rail of the upper sash. (Shown in Fig. 8.) The rear end of the bolt 24 projects through an opening 27 at the rear of the casing 23 and is formed with a shoulder 28. Pressing upward against the lower surface of the bolt 24 is a spring 29, while a slot 30 is provided for the lateral movement of the bolt 24. It is evident that the parts of this modification being positioned, as shown in Fig. 6, it is necessary to exert a downward pressure on the lug 11^a until the shoulder 28 clears the rear of the casing before the bolt 24 can be forced backward and unlocked, while the only operation in locking is to force this lug 11^a and bolt 24 forward, and the shoulder 28 immediately springs upward into the position shown. When the parts are positioned, as indicated, and locked, the lever 8 and latch 4 are operated as above, and it is manifest that the lug 11^a fulfills all the ends of the entire lock, as even were the lever 8 and latch 4 forced into the position indicated in Fig. 2,

it would then be necessary to disengage the bolt 24 from it, engaging recess 26. The casing 23 is intended to be mortised flush with the sash-rail.

The construction and arrangement of the several parts of my sash-lock being thus made known the operation and the advantages of the same will, it is thought, be readily understood.

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

1. In a sash lock the combination of a latch or lock with angle L-shaped slot 10 in one side thereof, and a slot 3 near one end, and a turned over-portion 14, a lug 11 with which the opening 10 engages, and a lever 8, all arranged substantially as and for the purpose set forth.

2. A sash lock comprising a latch or lock 4 provided with an L-shaped opening in one side, a longitudinal slot 3, turned over portion 14, and flange 5 having a cut-out portion 6, an operating lever 8 having at its inner end the cam surfaces 13 and 15, and at its outer end a reduced portion and a knob 18, substantially as and for the purpose set forth.

3. In a sash lock, the combination of a latch or lock 4 having an L-shaped opening 10 in one side thereof, a lever coacting with said latch or lock, and a spring pressed button having a bolt attached thereto, said button being adapted to engage with said opening 10, substantially as described.

In testimony whereof I hereunto set my hand in presence of two witnesses.

WILLIAM H. DEAN.

Witnesses:

W. G. SCOTT,
W. G. DEAN.