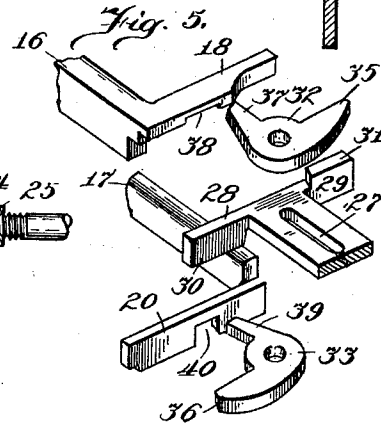
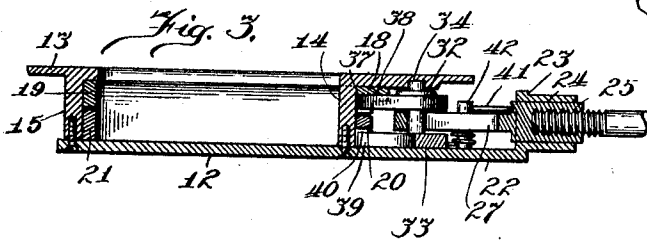
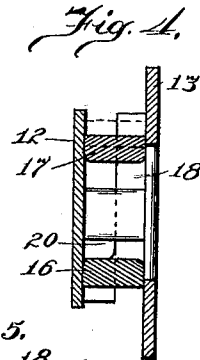
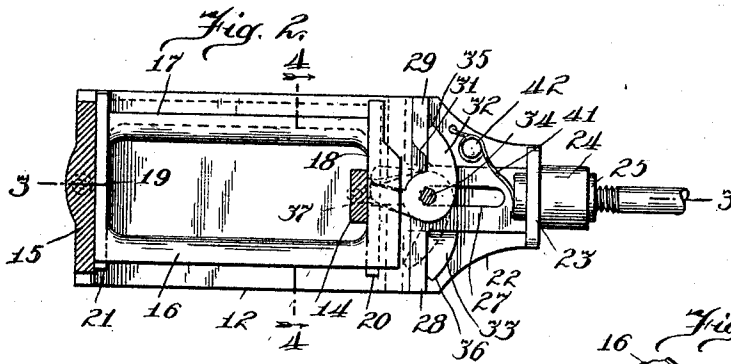
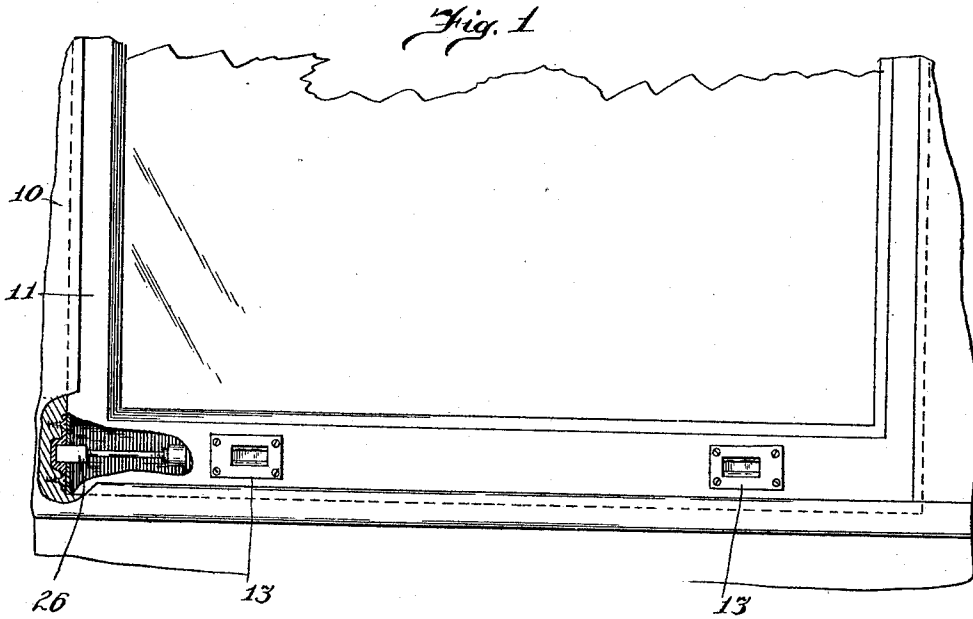


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SASH LOCK AND LIFT.
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1,029,803.

Patented June 18, 1912.



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SASH LOCK AND LIFT.

1,029,803.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed March 23, 1911. Serial No. 616,504.

To all whom it may concern:

Be it known that I, JAMES A. GIESE, a citizen of the United States, and resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Sash Locks and Lifts, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

10 The invention relates to locks especially adapted for use in connection with car windows, and being provided with means operating upon the application of pressure to either raise or lower the sash, for withdrawing the locking bolt; its objects being to secure simplicity of construction and easy control of the bolt, a further object being to provide a device of this kind which may be applied without modification to either side of the sash.

The present invention is an improvement on the form of construction which is the subject of my copending application Serial No. 593,556.

25 The invention consists in a structure such as is hereinafter described, and as illustrated in the accompanying drawings, in which—

30 Figure 1 is a detail elevation of a window casing and sash, some parts being broken away, to which the improved lock is applied; Fig. 2 is a detail longitudinal vertical section of the lock; Fig. 3 is a longitudinal section on the line 3—3 of Fig. 2; Fig. 4 is a transverse section on the line 4—4 of Fig. 2; and Fig. 5 is a perspective of various parts of the lock separated from each other.

40 A window casing is shown at 10, and a window sash slidably mounted within the casing is shown at 11. The lock is fitted within the bottom rail of the sash, and as shown in Fig. 1 two locks may be applied, one cooperating with each stile of the frame.

45 The lock comprises a suitable casing adapted to be set within a mortise in the sash rail so that its outer face is flush with the face thereof, a bolt reciprocating through a socket entering from the edge of the sash, a pair of grip members housed within the casing and adapted to receive upward and downward pressure, respectively, each grip member being operatively connected with the bolt so that upon the application of pressure for raising or lowering the sash the bolt is withdrawn.

The case of the lock comprises a base plate 12, a face plate 13, and end walls 14, 15, the back and face plates being united by means of screws which enter the end walls, such walls being preferably formed integral with one of such plates. The face plate 13 is apertured for the insertion of the fingers of the user in securing a grip for applying pressure to raise or lower the sash and to operate the lock. A pair of grip members 16, 17, are housed within the casing, one being located adjacent each side of the aperture of the face plate. Each of such grip members has laterally projecting arms 18, 19, and 20, 21, one of these arms of each pair being at each end of the grip member with which it is associated. The width of these arms is approximately one-half of the depth of the chamber of the casing. These lateral arms are so disposed and related that one pair rests and slides upon the other pair. The lateral arms 19 and 21 of the grip members are in sliding engagement with the inner face of the rearward wall 15 of the casing, and the other set of arms 18 and 20 is in sliding engagement with the forward or outer face of the wall 14.

The base plate 12 is extended forwardly, as shown at 22, such extension having adjacent its end an upstanding apertured flange 23, which is preferably provided with an apertured boss 24 surrounding the flange aperture and serving as a bearing for the tail block 25 of the bolt 26. The inner end of the block 25 is longitudinally slotted, as shown at 27, and is provided with laterally projecting arms 28, 29. The arm 28 is formed of a lateral lug 30 projecting toward the base plate 12; the arm 29 having a lateral lug 31 extending toward the face plate 13.

Two bell cranks 32, 33, are pivoted upon a post 34 rising from the base plate 12 and extending through the slot 27 of the tail piece of the bolt. These bell cranks are located upon opposite sides of the tail piece and each engages by one of its arms 35, 36, one of the lateral arms 28, 29, the arm 35 of the bell crank 32 making contact with the lug 31, and the arm 36 of the bell crank 33 making contact with the lug 30. The arm 37 of the bell crank 32 fits within a recess 38 in the forward arm 18 of the grip member 16. The arm 39 of the bell crank 33 fits within a recess 40 in the arm 20 of the grip

member 17. Lateral pressure applied to either of the grip members 16, 17, will, therefore, cause the oscillation of one of the bell cranks and the withdrawal thereby of the bolt. A spring 41, shown as mounted upon a post 42 rising from the extension 22 of the plate 12, bears outwardly against a shoulder on the tail piece of the bolt and normally holds the bolt in its advanced position. Upon release of pressure upon the grip member which has been used in withdrawing the bolt, the spring returns all of the parts to their normal position. Pressure may be applied at any point on the face of either of the grip members as they slide freely in their ways, the long bearings provided preventing any tendency to bind. It being entirely immaterial which of the grip members is uppermost, the lock may be applied at either side of the sash.

I claim as my invention—

1. In a sash fastener, in combination, a reciprocating bolt, a pair of oppositely disposed pressure bars movable laterally and in paths transverse to the path of the bolt, each bar having a pair of lateral arms, the arms of each bar being in sliding engagement with the arms of the other bar, and a pair of angle levers each having one arm in engagement with the bolt and its other arm in engagement with a lateral arm of one of the pressure bars.

2. In a sash fastener, in combination, a reciprocating bolt, a pair of oppositely disposed pressure bars movable laterally and in paths transverse to the path of the bolt, each bar having a pair of lateral arms, the arms of each bar being in sliding engagement with the arms of the other bar, and

means for operatively connecting one of the arms of each bar with the bolt.

3. In a sash fastener, in combination, a casing having an apertured face plate and having longitudinal and transverse slideways, a bolt reciprocating in the longitudinal slideway, a pair of reciprocating pressure bars within the casing, such bars being respectively adjacent each side of the plate aperture, lateral arms projecting from the ends of each bar and running in the transverse slideways, a pair of angle levers each having one arm in engagement with the bolt and one arm in engagement with one of the lateral arms of one of the pressure bars, and a spring for advancing the bolt.

4. In a sash fastener, in combination, a casing having an apertured face plate and having longitudinal and transverse slideways, a bolt reciprocating in the longitudinal slideway and having its tail piece longitudinally slotted, a pair of reciprocating pressure bars within the casing, such bars being respectively adjacent each side of the plate aperture, lateral arms projecting from the ends of each bar and running in the transverse slideways, a pin fixed in the casing and setting through the slot in the bolt tail piece, a pair of angle levers pivoted on the pin and each having one arm in engagement with a shoulder on the bolt tail piece, and one arm in engagement with one of the lateral arms of the pressure bars, and a spring for advancing the bolt.

JAMES A. GIESE.

Witnesses:

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