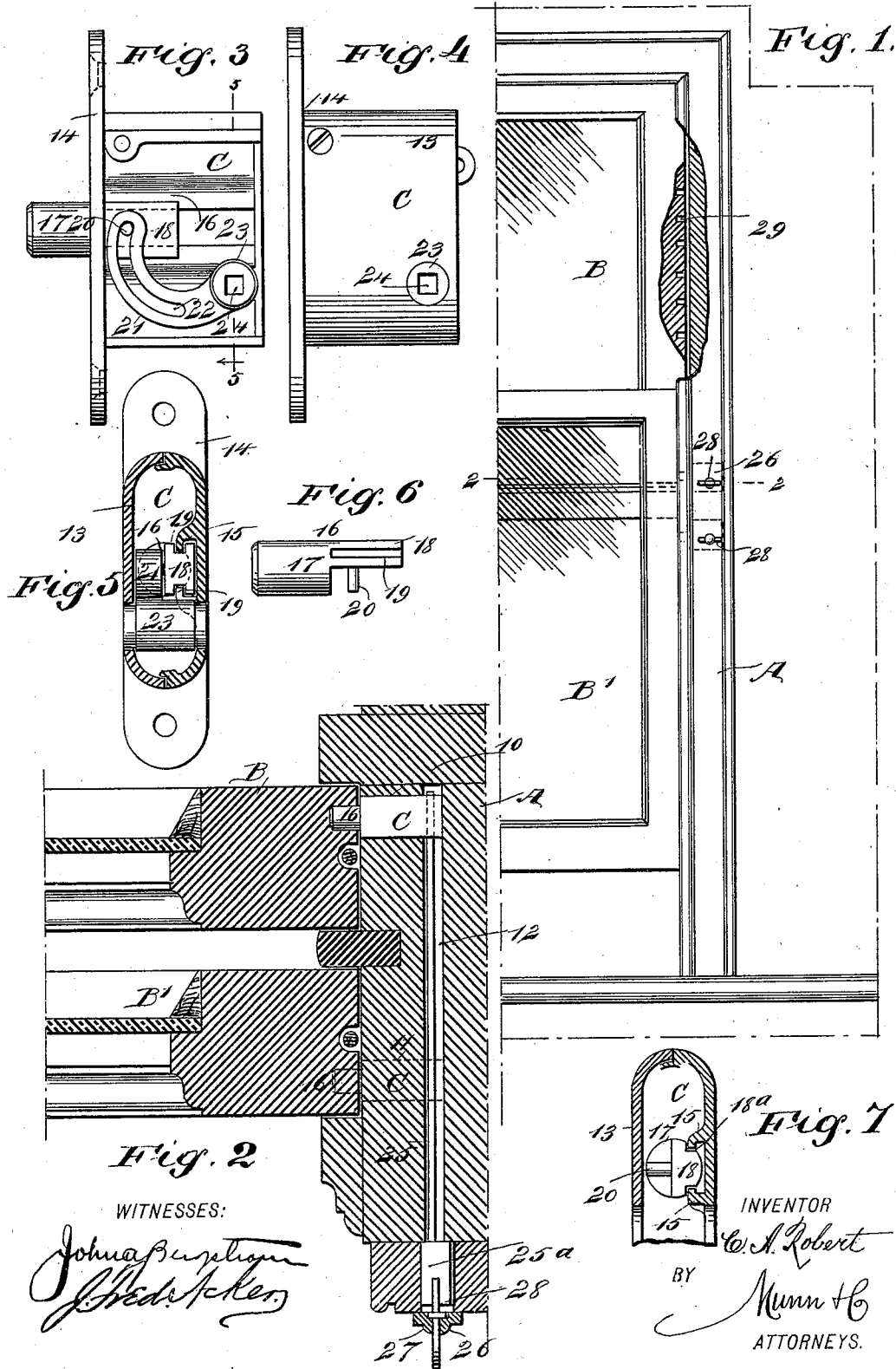


(No Model.)

C. A. ROBERT.
SASH LOCK.

No. 528,892.

Patented Nov. 6, 1894.



UNITED STATES PATENT OFFICE.

CHARLES A. ROBERT, OF PORTLAND, OREGON, ASSIGNOR OF ONE-THIRD TO
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SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 528,892, dated November 6, 1894.

Application filed March 30, 1894. Serial No. 505,699. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. ROBERT, of Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Sash-Lock, of which the following is a full, clear, and exact description.

My invention relates to an improvement in sash locks, and it has for its object to provide a lock of exceedingly simple, durable and economic construction, adapted to be located in the jamb of a window frame and to engage with the sash, the lock being manipulated from the front of the window frame.

Another object of the invention is to construct the lock in such manner that two locks may be employed in connection with each window sash, one for the upper and the other for the lower, without having one interfere in the least with the other, and without rendering their application at all unsightly.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a partial front elevation of a window frame, the upper and the lower sashes and the locks applied thereto, a portion of the upper sash being in section. Fig. 2 is a transverse section taken through both sashes and through a portion of the window frame, practically on the line 2—2 of Fig. 1. Fig. 3 is a side elevation of the lock proper, one section of the casing being removed to disclose the interior mechanism. Fig. 4 is a side elevation of the lock, the casing being intact. Fig. 5 is a vertical longitudinal section through the casing, said section being taken practically on the line 5—5 of Fig. 3. Fig. 6 is a plan view of the bolt of the lock removed from its casing; and Fig. 7 is a detail sectional view illustrating a slight modification in the support for the bolt.

In carrying out the invention the window frame A is of the usual construction, being provided with an upper sash B and a

lower sash B', and in one of the run-ways of the window frame a cavity or recess 10, is produced, while upon the same side of the frame a corresponding cavity or recess 11 is made in the run way for the lower sash, and these two recesses are out of horizontal alignment, one being higher than the other. Each recess is connected at the rear with a channel 12, the said channel extending from the recess with which it is in connection through the outer molding, as shown best in Fig. 2, the channel in the molding being preferably made larger than that in the jamb. Consequently one channel 12 will be shorter than the other, since the recess 11 in the run-way of the lower sash is nearer the front of the frame than the recess in the run-way for the upper sash, the two channels in the molding of the window framing being made one below the other, as shown in Fig. 1.

Each recess 10 and 11 is adapted to receive a casing C of the same character. The construction of the casing and the locking mechanism is best shown in Figs. 3, 4, and 5, and said casing comprises a body 13, made preferably in two sections, as shown particularly in Figs. 3 and 5. The body is hollow, and can be given somewhat of a rectangular or an elliptical shape in cross section, and one section of the body is made fast in any approved manner to a face plate 14, or formed integrally therewith, and when the casing is introduced into a recess in a run-way of one of the sashes, the face plate 14 is mortised in the said run-way, so as not to interfere with the movement of the sash.

Upon the inner face of that section of the casing which is fast to the face plate 14, slide-ways 15, are produced, and in said slide-ways a bolt 16 is located and has sliding and guided movement. The bolt preferably consists of a cylindrical head 17 and a rectangular shank 18, the shank being of less thickness than the head in a transverse direction, and said shank is provided at top and bottom with a longitudinal groove 19 into which the slide-ways 15 enter, and upon that portion of the face of the shank which is set back of the outer side face of the head of the bolt, a pin

20, is secured, extending preferably at a right-angle therefrom, and the said pin is made to face the removable section of the casing C.

A segmental arm 21, is employed in connection with the bolt, said arm being provided with a correspondingly shaped longitudinal slot 22, receiving the pin 20 of the bolt, as illustrated in Fig. 3. The arm 21 is provided at its inner end with a hub 23, which hub is journaled below the slide-ways 15 in both the fixed and removable sections of the casings, and the hub has produced therein a rectangular or polygonal bore 24.

When the casings C are set in their recesses, the bores 24 in the hubs of the segmental arms will be within the channels 12 formed in the jamb of the window frame, and a rod 25, is located in each of said channels 12, said rods being made to enter the bore 24 in the hub of the segmental arm. The rods are made to turn loosely in their channels, and when turned they will communicate like movement to the arms 21 with which they are connected. Preferably each rod, as shown in Fig. 2, is provided with a head 25^a, located in the enlarged channel in the molding of the window frame; and the outer end of each channel is usually covered by a face plate 26, provided with an aperture 27, said aperture being made to receive a key 28, which key while it may be held to turn within its face plate without danger of dropping therefrom, may be removed when occasion may require. The inner end of the key enters the head of a rod 25, and when the key is turned the rod is turned also.

The face of the window sash opposed to the run-way in which the bolt is located is provided with a series of apertures, openings or recesses 29, located at predetermined intervals apart in vertical alignment, and they extend longitudinally of the sash from a predetermined point near the top to a predetermined point near the bottom, said apertures, openings or recesses each being adapted to receive the head 17 of a locking bolt 16. Thus

it will be observed that either the upper or the lower sash may be held in any position in which it may be placed, and locked securely in that position, the locking being effected by turning a rod 25 in such manner as to cause the segmental arm 21 connected with it to move the bolt in connection with said arm outward into one of the apertures 29, and the bolt cannot be removed until the rod 25 has been again shifted to its first position, which can only be accomplished through the medium of the key 28, and if said key is removed the sash will remain locked until it is again introduced and manipulated. It will be understood that an independent device is employed for the top and for the lower sash of a frame.

In Fig. 7 I have illustrated a slight modification in the support for the bolt 16, in which the shank 18 is semicircular and is provided with a flattened upper and lower surface 18^a to receive the slide-ways 15. The said flattened surfaces may be continued any desired distance along the head of the bolt when occasion shall so demand.

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

In a window lock, the combination, with a casing provided with slide-ways formed therein, a bolt one end of which is capable of passing out through the casing, the body portion of the bolt being reduced in width in one direction and provided with grooves to receive the slide-ways of the casing, and further provided with a pin upon one of its body faces, of a segmental arm slotted to receive the said pin, and provided with a hub fitted in the casing, a rod adapted to fit into the hub of the arm and turn said arm, and a key operating the said rod and removable therefrom, as and for the purpose set forth.

CHARLES A. ROBERT.

Witnesses:

H. CANE,

W. H. MONROE.