No. 834,743. PATENTED OCT. 30, 1906.

C. F. MASON.

SASH LOCK.

APPLICATION FILED APR. 13, 1906.

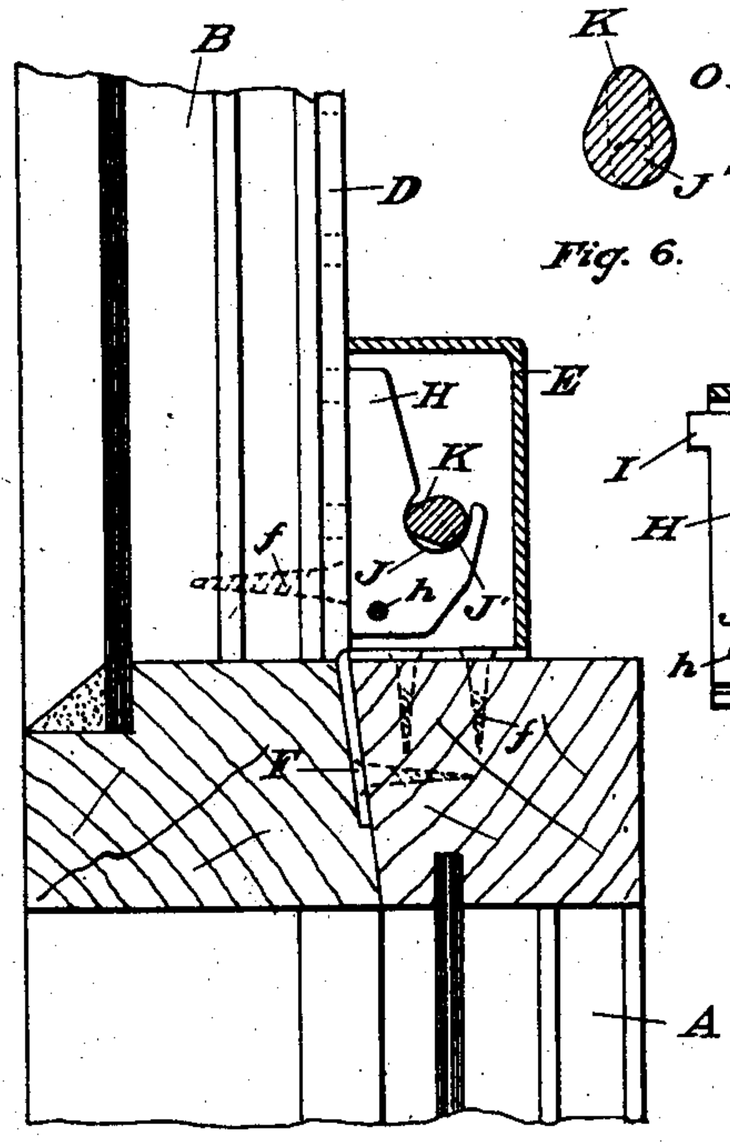

Fig. 1.

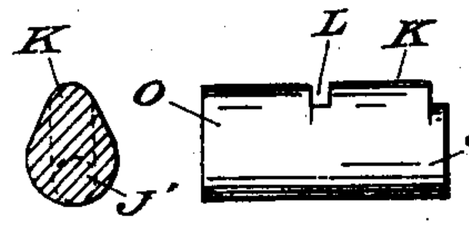

Fig. 6.

Fig. 7.

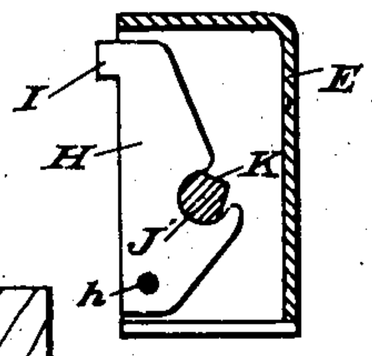

Fig. 8.

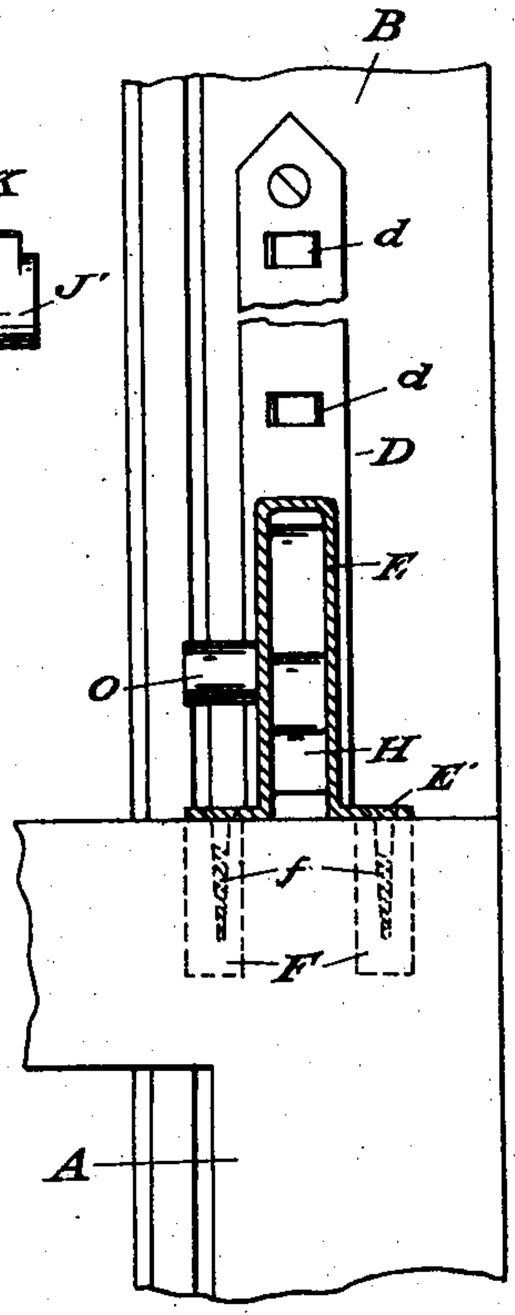

Fig. 2.

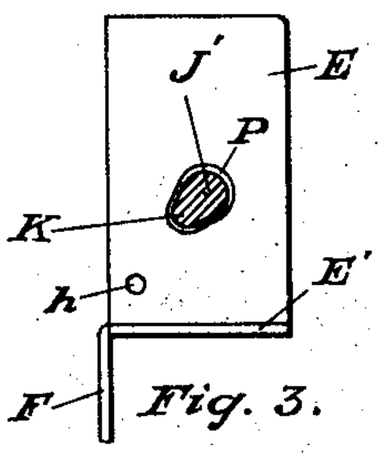

Fig. 3.

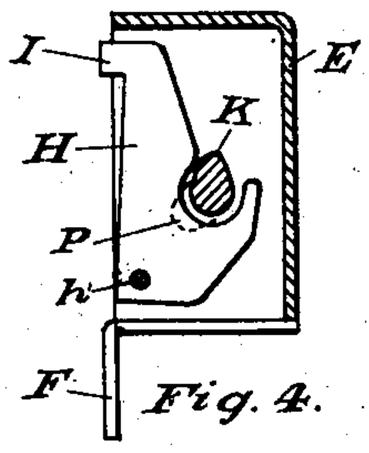

Fig. 4.

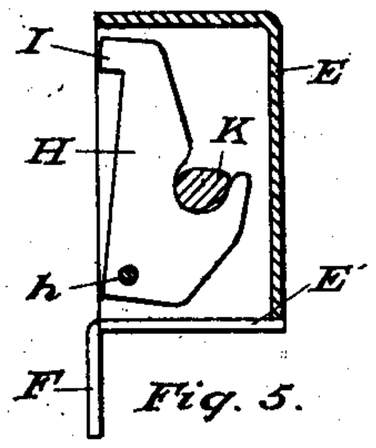

Fig. 5.

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SASH-LOCK.

No. 834,743. Specification of Letters Patent. Patented Oct. 30, 1906.

Application filed April 13, 1906. Serial No. 311,541.

To all whom it may concern:

Be it known that I, CALVIN F. MASON, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Sash-Locks; and I do 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 make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a window-sash lock that will be compact, simple in construction, and easily manipulated, that will possess unusual strength and neatness and be readily adjustable to sashes, will hold them locked rigidly together, and when in their normal position prevent rattling or entrance of dust, that will permit adjustment for ventilation at bottom of lower sash, top of upper sash, or at both simultaneously, at the same time preventing the entrance of burglars, that by reason of substantial construction cannot get out of order, and the cost of manufacture of which is reduced to a minimum.

I accomplish my object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of the lock and its housing and plate attached to the sashes. Fig. 2 is an elevation of the same, showing a cross-section of the housing. Fig. 3 is a side view of the housing with a combined cam and axle shown in the opening in the housing through which it is inserted. Fig. 4 is a sectional elevation of the housing, its side plate removed, showing the cam and axle turned to the position they must occupy to allow a casting to be placed in position in the housing. Fig. 5 is a similar view of the housing, the cam, the casting, and its lug thrown backward out of locked position. Fig. 6 is a detail cross-section of the combined cam and axle, the dotted lines representing the same in a flat form. Fig. 7 is a detail elevation of the same. Fig. 8 shows a casting and cam of somewhat-different form, the concavity in the casting slightly smaller and more nearly circular, the cam being near the shape of a quarter-round.

Similar letters refer to similar parts in the several views.

In the drawings, A represents a lower and B an upper window-sash.

D is an elongated metal plate rigidly fastened on the face of a stile of an upper sash, its lower end resting on the usual slight projection of the check-rail of a top sash and fitting closely in the right angle formed by said stile and check-rail. A plurality of receptacles *d d* are stamped or molded in said plate, and its upper end is pointed, as shown in Fig. 2. A metal case forming a housing E with open front is rigidly attached on the top of the check-rail of the bottom sash forward of said plate D. The sides of said housing at its base are bent outward oppositely, forming flanges E′ E′. Straps F F are extensions of said flanges bent downward. Perforations in these flanges and straps permit the insertion of screws *f f* to hold the housing immovable. A casting H is supported in the housing by a pivot *h*. This casting is provided with a lug L, adapted to engage with receptacles *d d* to lock the sashes together. When thus locked, the front of said casting sits immovable and plumb against the face of plate D, as shown in Fig. 1. The back of said casting is provided with a concavity J, in which a cam K is manipulated. This cam and its axle J′, which is carried in the sides of the housing, are cast as a single piece. A slot L (shown in Fig. 7 in the middle of said piece) separates the cam from end O, which serves as a knob or thumb-piece by which the combined axle and cam are manipulated, said slot also permitting the rotation of the axle in the sides of the housing. To lock the sashes, the cam is turned forward into contact with the front of concavity J and the casting thereby tipped forward, and its lug is projected and held in one of receptacles *d d*, as shown in Fig. 1. When the cam is rotated backward to the position shown in Fig. 5, the upper part of the casting is carried backward and said lug thereby released from its engagement with receptacle *d*, the sashes being thus disengaged from each other. Said combined cam and axle when inserted into the housing must pass through opening P of corresponding shape in one side of the housing, as shown in Fig. 3. When the cam is turned to the position shown in Fig. 4, the casting may be inserted and pivoted in position in the housing; but the side of the casting when it is thus placed in position partially closes the cam-shaped opening P, as shown by dotted lines in

said Fig. 4. It is then absolutely impossible to rotate the cam down to its place of entrance in opening P unless pivot *h* is withdrawn and the casting displaced. The additional weight of the cam on the axle in its locked position (shown in Fig. 1) is such that it will tend to automatically hold it forward, and the most violent jarring or shaking of the sashes will only tend to wedge it the more securely in locked position. When housing E and its sash have been raised above plate D, the point at the top of said plate is adapted to receive straps F F as the sash descends, preventing jar or catch, and said straps passing on either side of said plate serve as guides for said plate, holding the sash plumb, securing regular motion and sure and perfect entrance of lug I into receptacles *d d*. As sashes fitted with this device are ordinarily kept locked, the usual weights of the lower sash can be omitted, those of the upper sash being made somewhat heavier.

What I claim, and desire to secure by Letters Patent, is—

1. A sash-lock comprising a housing open at the front, the oppositely-projecting base-flanges having duplicate forward extensions, a pivoted locking-dog with key or cam recess, a combined cam, axle and thumb-piece provided with a slot between the cam and thumb-piece to permit rotation and an opening corresponding in form with the cam and axle to permit insertion within the housing, substantially as set forth and shown.

2. In a window-sash lock the combination with a plate provided with receptacles and a housing, a locking-dog with an operating-cam recess, a lug on the front thereof adapted to engage with said receptacles, a combined cam and axle adapted to be inserted in said housing through an opening of corresponding shape and carried by the sides of the housing and the extension of said cam and axle constituting a thumb-piece and separated from the cam by a slot permitting the axle to be rotated, substantially as shown and described.

3. In a sash-lock, an axle, a projection on its periphery forming a cam and an extension separated from the cam by a slot and constituting a knob or thumb-piece, substantially as shown and set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CALVIN F. MASON.

Witnesses:
EMMA HECKEL,
WILL E. WOODSON.