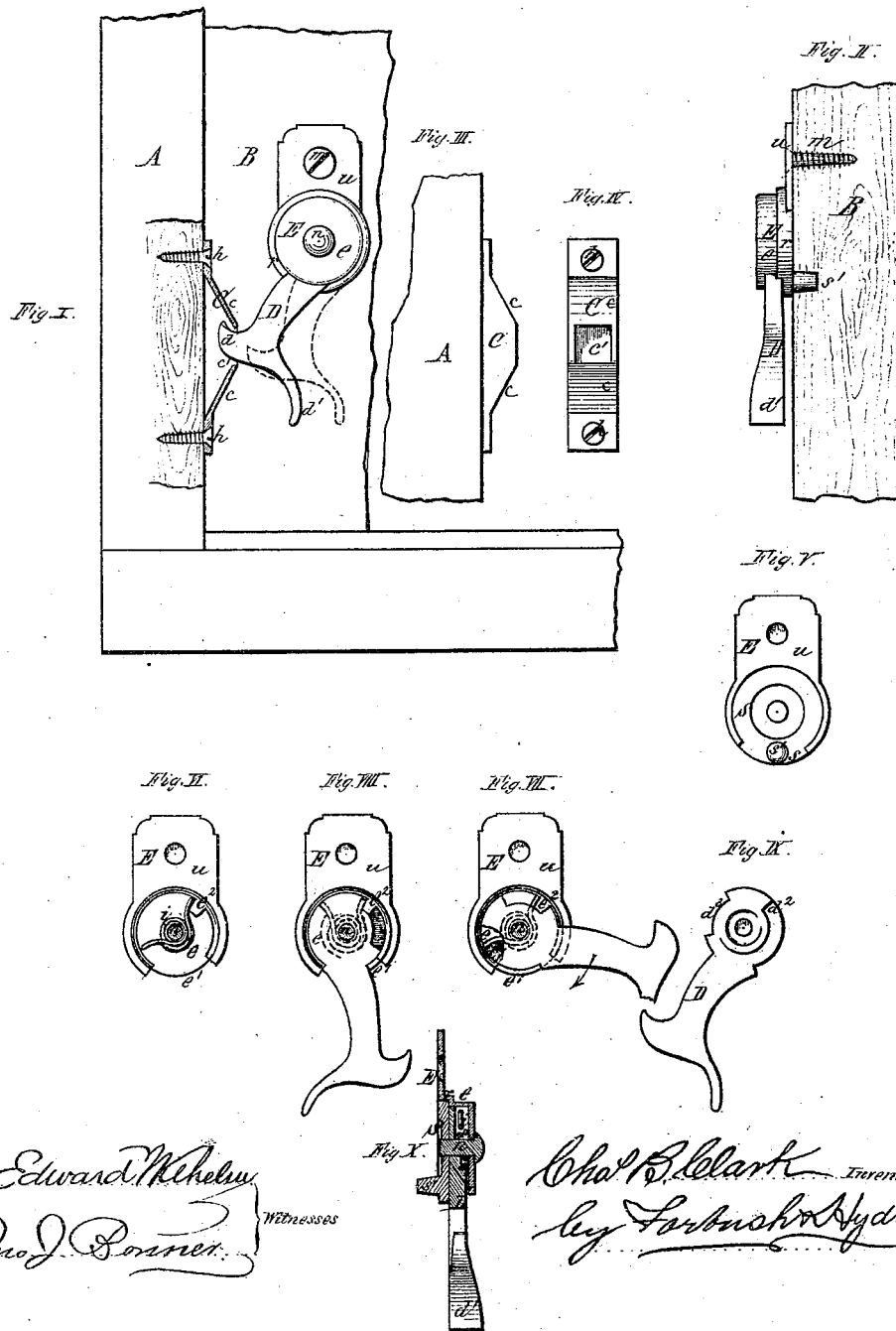


C. B. Clark

Slash Holder.

No. 108,968.

Patented Nov. 8. 1870.



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United States Patent Office.

CHARLES B. CLARK, OF BUFFALO, NEW YORK.

Letters Patent No. 108,968, dated November 8, 1870.

IMPROVEMENT IN SASH-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, CHARLES B. CLARK, of the city of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Window-sash Locks, of which the following is a specification.

My improvements relate to a kind of fastening which is designed to be attached to the surface of the window-casing and sash without requiring any mortising for the purpose.

My improved lock consists of a metallic socket for attachment to the window-casing in relief, provided with inclined surfaces or ways to guide the ends of a spring or automatic locking-catch or bolt into the socket as it approaches the latter, in either direction, during an upward or a downward movement of the sash, and of an automatic locking-arm or catch, pivoted and secured with a coiled spring in a cap-bearing plate, which is fastened to the surface of the sash, the parts being constructed and arranged as hereinafter fully shown and described.

In the accompanying drawing—

Figure I is an elevation of the spring-arm as attached to the sash, shown engaged with socket-plate, which is represented in vertical section, secured in place to the window-casing.

Figure II is a vertical section of the side bar of the sash, showing the manner of securing the spring-arm and cap-bearing plate thereto.

Figures III and IV, a side and face view of the metallic socket.

Figure V is a plan of the back or inner face of the bearing-plate or cap.

Figure VI is a view of the interior of the cap, showing the coiled spring, and stop cast with the former for securing the end of the latter in place.

Figure VII is a similar view, with the addition of the arm-catch arranged in the position for compressing the spring in place by means of a shoulder cast with the arm, which retains one end of the spring.

Figure VIII is a view similar to the last, with the parts arranged in their proper and operative position.

Figure IX is an inner face view of the arm-catch, showing the shoulder thereon, beyond which one of the ends of the spring is secured.

Figure X is a section of the spring-arm and its bearing-plate.

Like letters of reference designate like parts in each of the figures.

A is a portion of the window-casing.

B, a portion of the window-sash.

C, metallic socket, represented fastened to the casing by two screws, *h h*, with its face formed by two inclines, *c c*, which project outwardly and toward the center, where the hole or socket *c'* is made, as shown in Figs. I, III, and IV.

D is an arm-catch, provided with a locking projection, *d*, which fits in the socket-hole *c'*, and a thumb-piece, *d'*, by which it is disengaged or released therefrom. Its inner end is made of circular form, so as to fit and turn in the circular depression in the cap or bearing-plate.

The inner face of this end of the arm is also formed with a shoulder, *d''*, and its edge with a notch, *d''*.

E is the cap or bearing-plate, cast with a depression or pocket, *e*, to receive the rounded end of the arm, which socket or depression is left open at one end, or provided with a recess, as shown at *e'*, Figs. VI, VII, and VIII, for the arm D to fit and work in.

The base of this circular depression is also formed with a stop or spur, *e''*, which serves to retain one end of the spiral or coiled spring *i*, that rests against it, as shown in Fig. VI, in which the spring is represented as arranged around a rivet, *n*, inserted through a hole in the cap, which serves as a guide or bearing for the spring. The spring being in the position shown in this figure, the arm D is applied thereto, with the shoulder *d''* in contact with the end of the spring opposite the stop *e''*, as represented in Fig. VII. By turning the arm in the direction of the arrow in the latter figure, the shoulder *d''* compresses the end of the spring in contact therewith, until it is made to assume the position shown in Fig. VIII, in which the ends of the spring are represented retained in place between and by the stop and shoulder *e'' d''*, the arm projecting through the open side or notch *e'* of the cap, and the stop *e''* up in the notch *d''* in the edge of the arm.

These parts being arranged as described, a disk or plate, *S*, fitting in and resting on a shoulder or ledge, *r*, around the edge of the circular recess or socket of the cap, forms a washer and cover, through which the end of the rivet passes, and is riveted, as shown in Fig. X, securing the end of the arm D in place between this washer and the base of the cap.

The plate or washer *S* extends outward in the recess *e'*, flush with the edge of the cap, as shown at *s*, whereby it is prevented from turning on its seat.

The bearing or cap E is secured to the sash by means of a flange, *u*, on the side opposite the notch *e'*, through which a screw, *m*, is inserted into the wood.

To prevent this cap or bearing from turning, a pin or spur, *s'*, cast with the washer-plate at the side opposite the flange *u*, is driven or inserted in the sash, which enables a single screw to properly secure the device in place.

My improved fastening being constructed and put together as hereinbefore described, and arranged with the sash and casing as shown in Fig. I, its operation becomes obvious. The sash in this figure, which is

shown locked down, is released by withdrawing the spring-catch D, as represented by dotted lines. The socket-plates C being attached to the casing at intervals, the raising or lowering of the sash causes the catch *d* to slide up or down the inclines *c* until it reaches the socket *c'*, into which it is automatically forced by the action of the spring *i*, whether the sash is being raised or lowered.

The notch *e'*, in the cap or bearing E, forms a stop for the arm, so as to prevent the catch *d* from coming in contact with and wearing the casing between the sockets as the sash is raised and lowered.

My improved fastening can be cheaply made by casting the parts complete, can be easily applied without mortising either the sash or casing, and forms a reliable fastening, certain in its operation, and, being exposed to view, the accidental falling of the sash and breaking of the glass, which so frequently occurs when the locking parts are concealed, are avoided.

What I claim is—

1. The hinged spring arm D, provided with hooked catch *d* and thumb-piece *d'*, and arranged to operate in combination with a doubly-inclined socket-plate, C, as hereinbefore specified.

2. The cap-plate E, provided with stop *e'*, arranged with the spring *i*, rivet *n*, and arm D, provided with shoulder *d'*, substantially as and for the purpose hereinbefore set forth.

3. The notch *d'* in the arm D, arranged with the projection *e'* in the cap-plate E, as and for the purpose hereinbefore set forth.

4. The cover or washer S, provided with extension *s* and spur *s'*, arranged with the cap-plate E, provided with recess *e'* and flange *u*, as and for the purpose hereinbefore described.

CHARLES B. CLARK.

Witnesses:

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