

No. 824,567.

PATENTED JUNE 26, 1906.

J. I. MOSS.
SELF ACTING WINDOW LOCK.
APPLICATION FILED SEPT. 18, 1905.

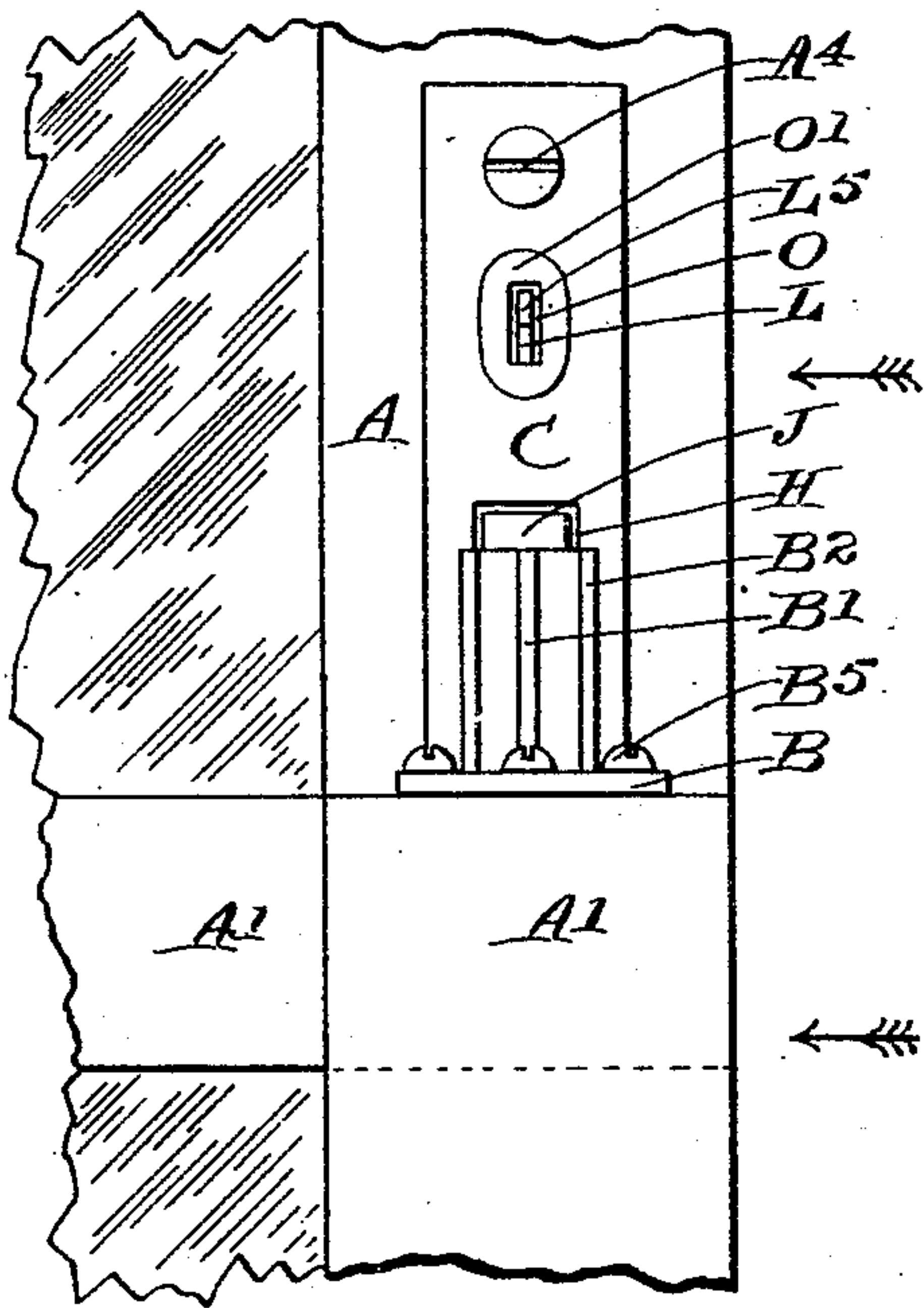


Fig. 1.

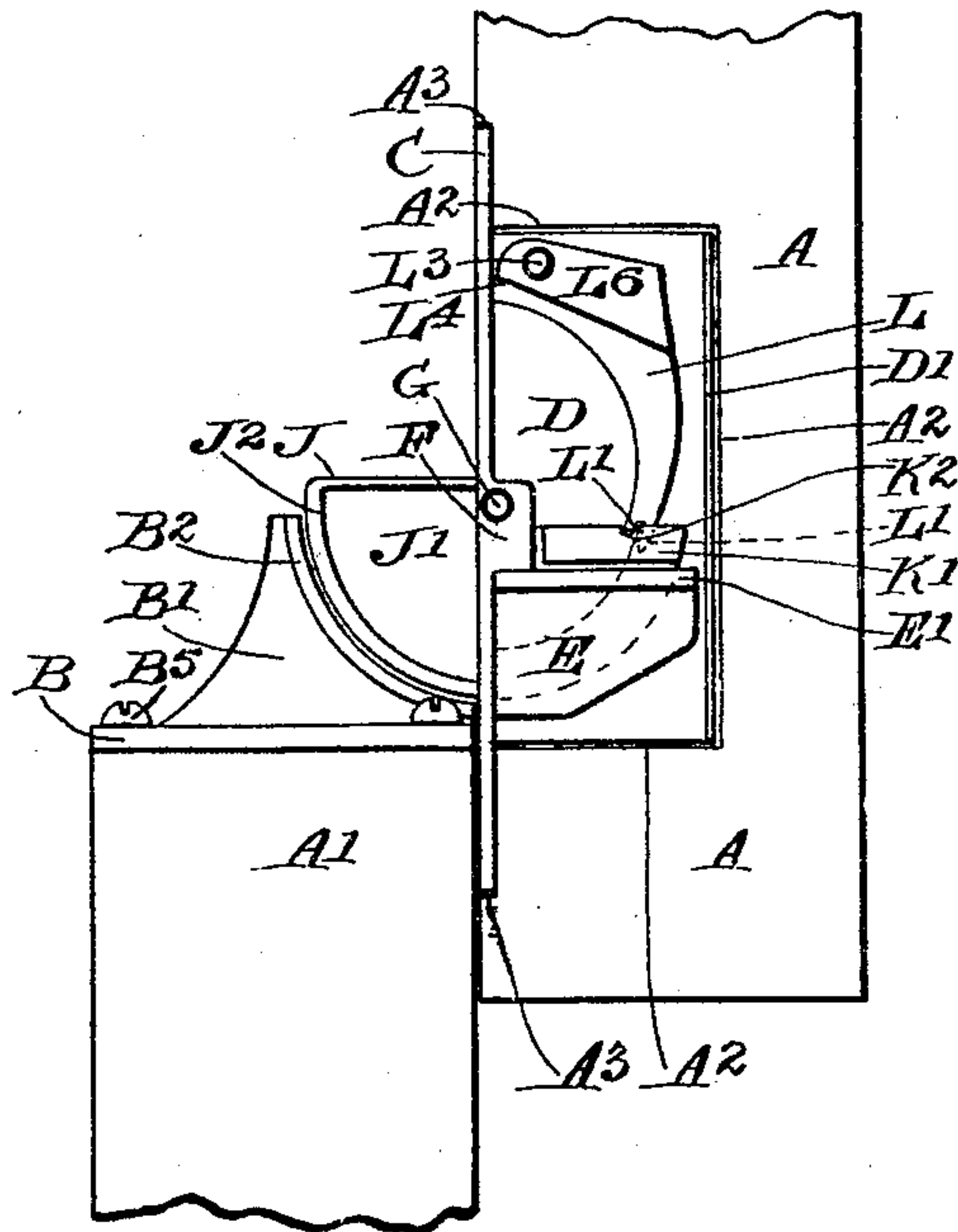


Fig. 2.

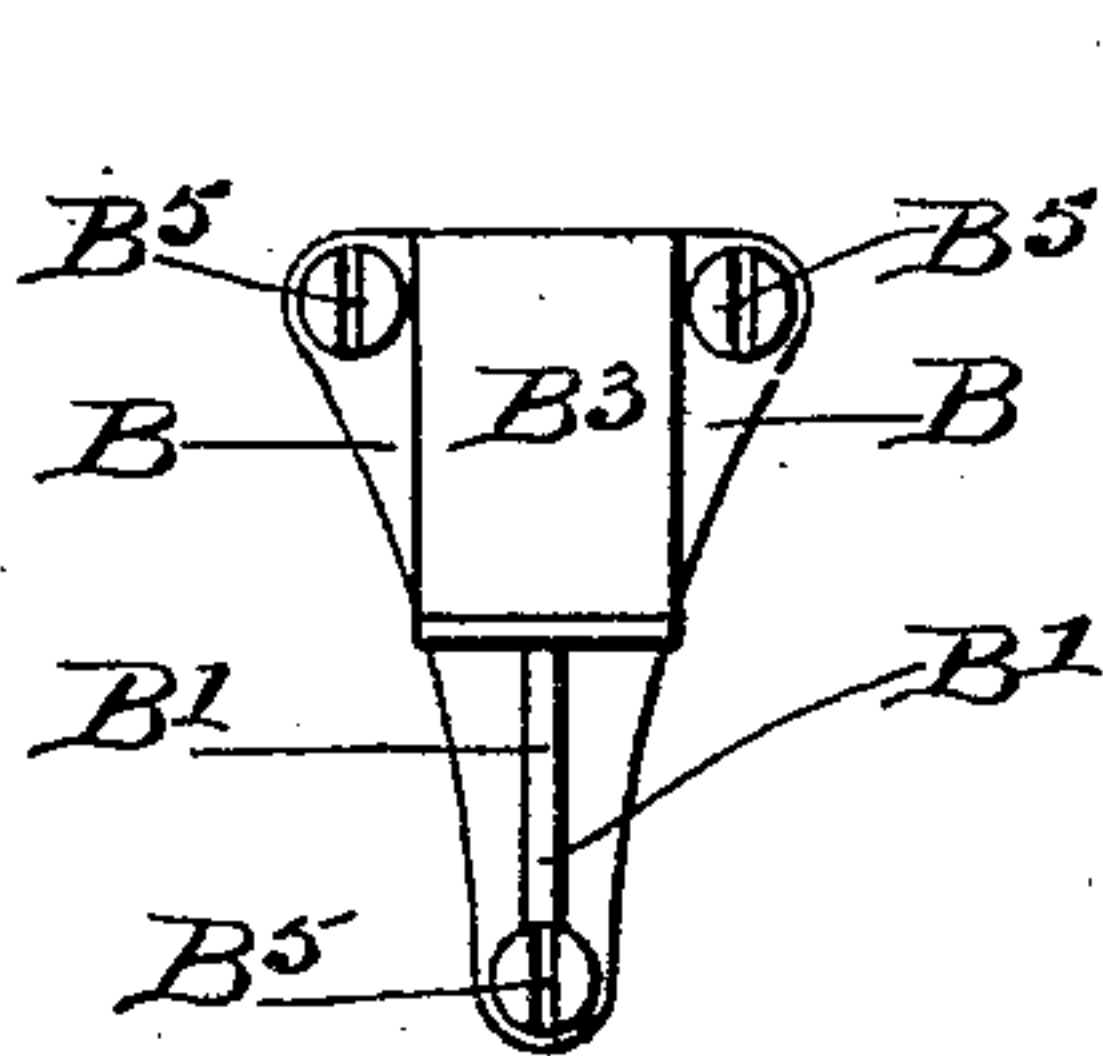


Fig. 3.

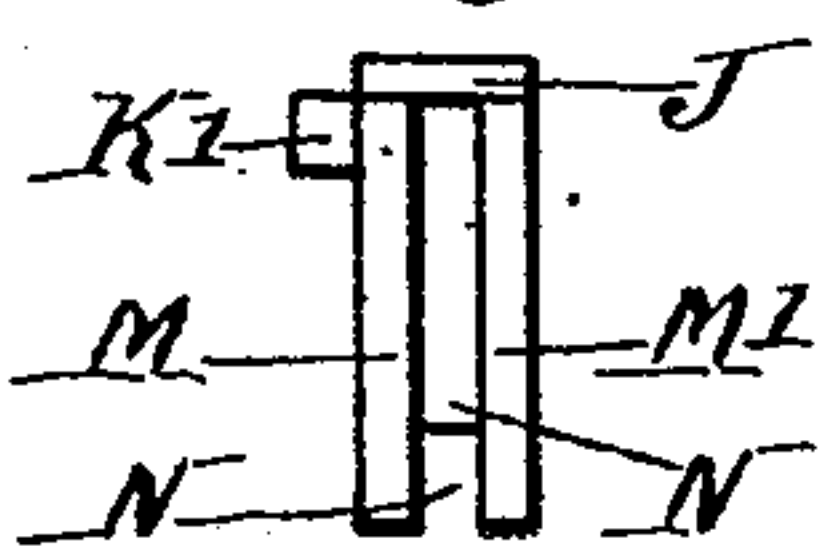


Fig. 6.

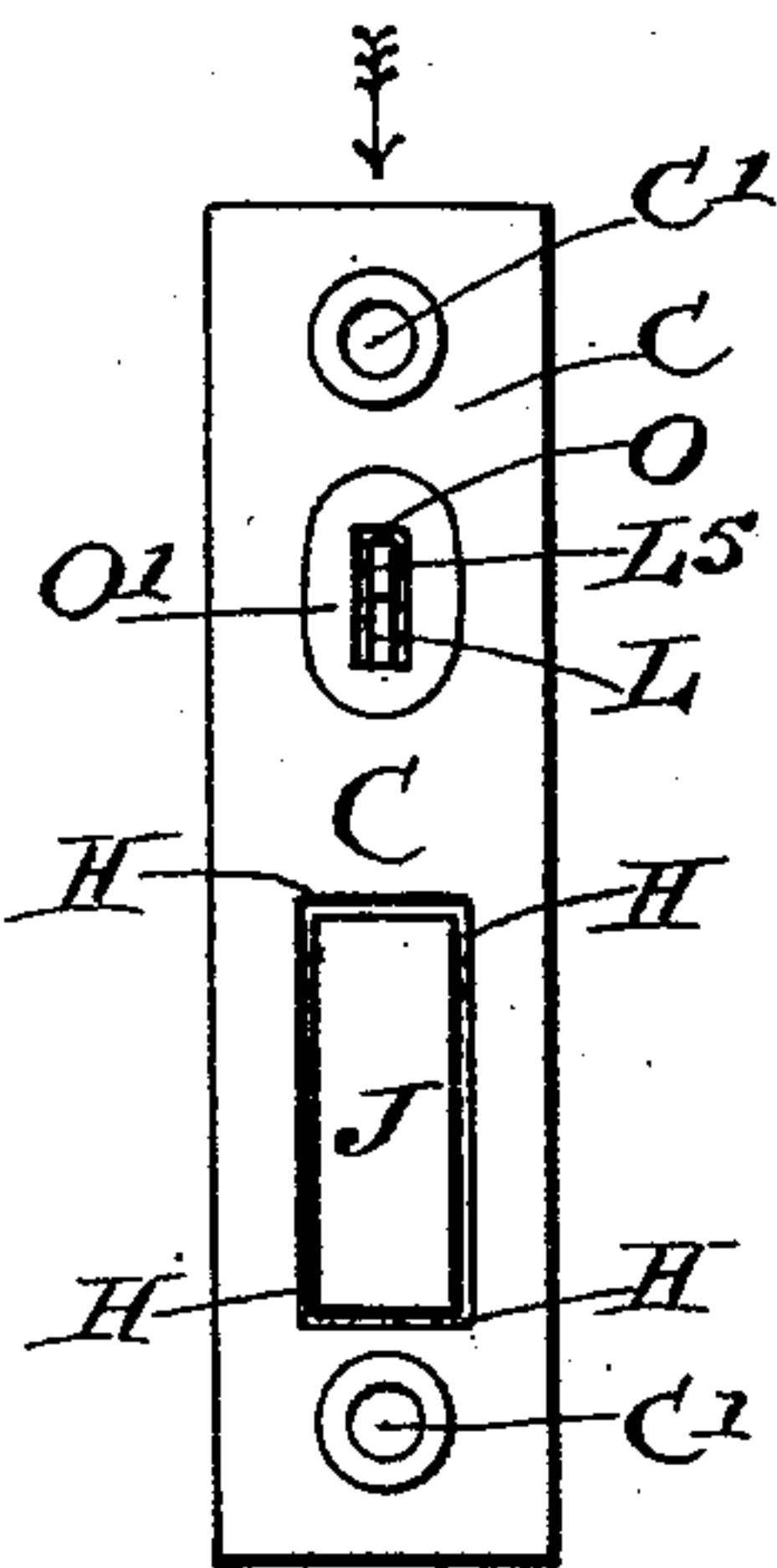


Fig. 4.

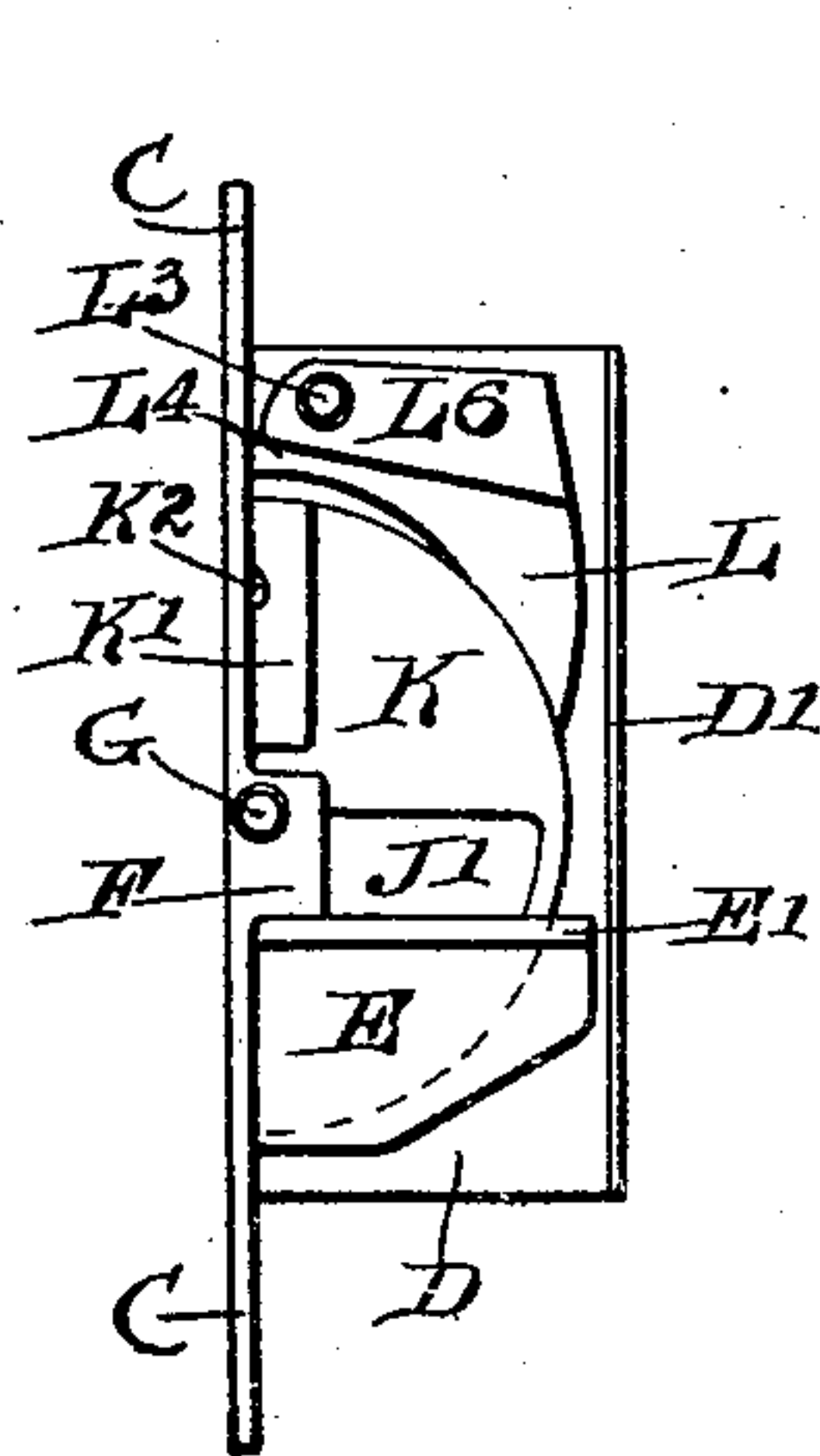


Fig. 5.

witnesses
J. M. Fowler Jr.
Ruth J. Mitchell

Inventor:
John Isaac Moss
By Mason, Furwick & Lawrence
Attys.

UNITED STATES PATENT OFFICE.

JOHN ISAAC MOSS, OF ABBOTSFORD, VICTORIA, AUSTRALIA.

SELF-ACTING WINDOW-LOCK.

No. 824,567.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed September 18, 1905. Serial No. 279,036.

To all whom it may concern:

Be it known that I, JOHN ISAAC MOSS, a subject of the King of Great Britain and Ireland, residing at 196 Vere street, Abbotsford, in the county of Bourke, State of Victoria, and Commonwealth of Australia, have invented certain new and useful Improvements in Self-Acting Window-Locks, of which the following is a specification.

10 The object of my invention is to provide a safety-lock for window-sashes which will automatically lock the said sashes together when they are in their normal or closed position.

15 My invention, which is cheap in first cost, is of few parts, all of which are of simple construction and are not liable to breakage or derangement. In addition, my invention when fitted to a window does not require skill to operate; but at the same time if once locked the window cannot by any means or instrument be opened from the outside.

20 My invention is applicable to window-sashes of the ordinary vertical sliding pattern and may be fitted to existing sashes of that description.

25 That portion of my invention which is secured to the top of the bottom sash may be connected so as to bear against the upper sash in such a way that it will act as an anti-rattler. The fittings to the top sash may be so attached that a window may be securely locked and yet at the same time open at the top to allow for ventilation.

30 Referring to the drawings which form a part of this specification, Figure 1 is a front elevation of a portion of one side of a lower and an upper sash of a window-frame with my invention fitted. Fig. 2 is a side elevation of the same looked at in the direction of the arrow shown in Fig. 1. Portion of the side of the upper sash has been removed for the convenience of illustration. Fig. 3 is a plan of the quarter-circular bearing attached to the top of the side of the lower sash. Fig. 4 is a front elevation of my attachment to the upper sash. Fig. 5 is a side elevation of Fig. 4 and showing the semicircular disk and the pawl in the position both occupy when the sashes are unlocked and free to move either up or down. Fig. 6 is an end elevation of the semicircular disk and showing the slot which accommodates the pawl shown in Figs. 2 and 5.

55 Similar letters of reference indicate similar

or corresponding parts where they occur in the several views.

My invention includes window-sashes of ordinary vertical sliding pattern. To the top of the lower sash A' and on either one or both sides of the framework of the same I secure a quarter-circular bearing B. This has a base, a strengthening-rib B', shoulders B², and a bearing-face B³. The said bearing is secured to the top of the lower sash A' by means of screws B⁵, or it may be attached thereto in any suitable way. The other portions of my invention are carried on the top sash A, in which is made a pocket A² and a recess A³ to accommodate them.

The portions carried on the top sash consist of a rectangular plate C, which is placed in the recess A³ and is secured to the sash by means of screws A⁴ or the like. There are two or more countersunk holes C' in the plate C to accommodate the said screws. The said rectangular plate C has on its outer side an integral cheek D, which has an extension D' bent at right angles to it. On its inner side the plate C has an integral guide E. This guide on one side has a shoulder E'. Protruding from the rectangular plate C and just above the guide E is a lug F. This lug has a hole therein. A corresponding hole is made in the cheek D. In these holes is a pivot-pin G. This pivot-pin G bridges an elongated slot H in the rectangular plate C before mentioned. Intermediately suspended in the slot H by the pivot-pin G is a semicircular disk. This disk is capable of moving radially between the cheek D and the guide E. The outer half J of the semicircular disk is lightened by having portions removed therefrom which form recesses J' and strengthening-ribs J². The inner portion K of the semicircular disk has no parts removed and is therefore of weightier construction than the outer portion J'. Integrally formed upon its top is a stop K'. Across the top of the inner portion K of the semicircular disk I make an incut K², which engages the forked end L' of a pawl L, hereinafter described.

The inner portion K of the semicircular disk is composed of two members M and M', between which is a circumferential slot N. The object of this slot is to accommodate the pawl L when the said half-disk turns on its pivot. To the top of the cheek D of the rectangular plate C, I pivot at L³ a pawl L. The lower end of this pawl has a fork L', which en-

gages in the incut K^2 in the inner portion K of the semicircular disk. The upper end L^4 of the pawl L has an extension L^5 , which extension protrudes through a small elongated slot O, formed in the upper portion of the rectangular plate C. The said extension L^5 of the pawl does not extend past the outer surface of the rectangular plate C; but to enable it to be operated by the finger, as hereinafter explained, the said plate C is countersunk around the slot, as at O'. The top of the pawl is weighted, as is seen at L^6 in Figs. 2 and 5.

The cycle of operations with my invention is as follows: When either or both of the sashes are or is out of its normal position and the window open, the said sashes are either pulled down or pushed up, or both, until they are in their normal or closed position. Immediately the bearing-cheeks of the sashes pass the semicircular disk (which while a window is unfastened or open is in the position shown in Fig. 5) the said disk by its own weight turns on the pivot-pin G and the outer end passes over the face of the bearing B on the lower sash. This locks the sashes, and to prevent the lock being tampered with the fork L' of the pawl L engages the incut K^2 in the inner portion K of the semicircular disk. The greater the pressure exerted to open the window the more tightly the lock holds. In its fastened position my attachments are as seen in Fig. 2. When it is desired to open the window, the finger of the operator is passed quickly down the rectangular plate C in the direction of the arrow shown in Fig. 4. The finger as it is pressed downward carries the extension L^5 of the pawl L with it. This causes the fork L' to disengage from the incut and the inner portion K of the semicircular disk. The finger as it passes still further downward strikes the outer portion J of the said half-disk, which turns inward on the pivot-pin G, and the sashes are free to be moved either up or down.

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

1. In a device of the character described, the combination with an upper and a lower sash, of a bearing carried by the lower sash, a vertical, rectangular plate carried by the upper sash, an integral cheek formed upon said plate, said cheek provided with an aperture, a guide integral with said plate, a shoulder formed on said guide, a lug provided with an aperture, extending from said plate, a pin supported by the apertured portion of said plate and lug, said plate provided with an elongated slot, a substantially semicircular disk secured to said pin, and being capable of radial movement between said cheek and guide, said disk having its outer end lightened and provided

with a strengthening-rib, a weight formed upon the inner portion of said disk, and a stop formed upon the top of said inner portion of the disk, the disk being capable of movement within the elongated slotted portion of said plate for engaging the bearing carried by said lower sash.

2. The combination with an upper and a lower sash, of a bearing provided with a curved bearing-surface, carried by said lower sash, a semicircular disk pivotally mounted upon said upper sash and normally engaging the bearing-surface of said bearing, said disk provided with a weighted, inner end, and a weighted pawl carried by said upper sash and normally engaging said disk and being capable of securing said disk in a stationary position.

3. In a device of the character described, the combination with an upper and a lower sash, of a disk pivotally mounted upon said upper sash, a stop formed upon the inner portion of said disk, said disk provided with a notched, inner portion, a pawl pivotally mounted within said upper sash, said pawl being of greater width at its upper end and converging throughout its length toward its lower end, the lower end of said pawl normally engaging the notched portion of said disk for holding said disk in a locked position and in the path of movement of said lower sash.

4. In a device of the character described, the combination with an upper and a lower sash, of a locking member pivotally mounted upon said upper sash, a pawl pivotally mounted upon said upper sash and normally engaging said locking member for securing the same in a locked position, said pawl being of greatest width at its upper end and converging throughout its length toward its lower end, and a weight formed upon the upper end of said pawl.

5. In a device of the character described, the combination with an upper and a lower sash, of a disk pivotally mounted upon said upper sash, said disk provided with a weight and a stop formed upon its inner end, a curved pawl tapering throughout its length from one end to its opposite end, said pawl pivotally mounted upon said upper sash, and a weight formed upon said pawl, the pawl being adapted to engage the inner end of said disk for normally holding said disk in a locked position and in the path of movement of the lower sash.

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

JOHN ISAAC MOSS.

Witnesses:

CECIL M. PLASTRIER,
GEORGE A. U'REN.