E. M. HOAGLAND.

WINDOW LOCK.

APPLICATION FILED MAR. 22, 1915.

1,154,861. Patented Sept. 28, 1915.

Fig. 1.

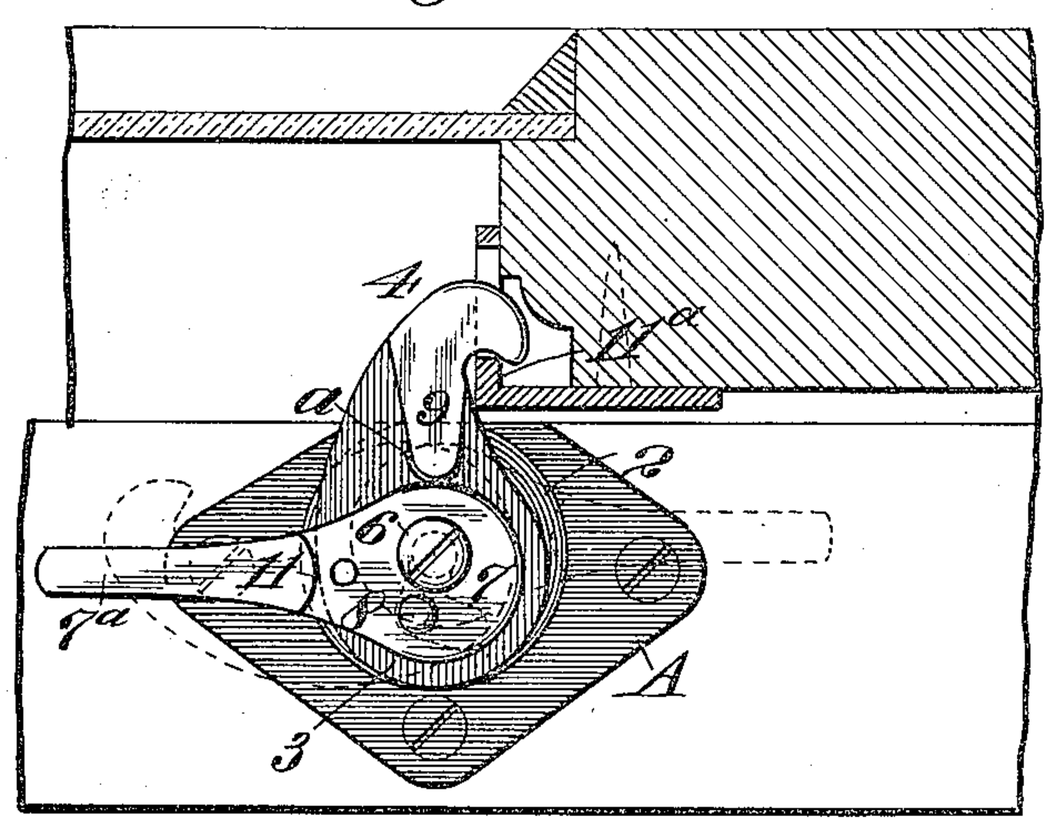


Fig. 3.

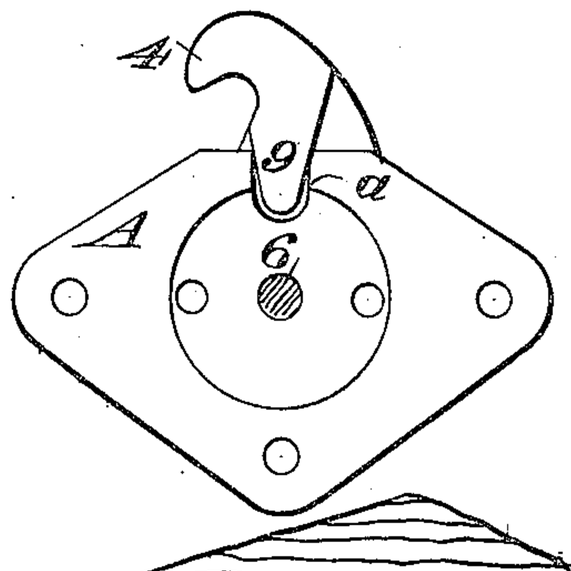
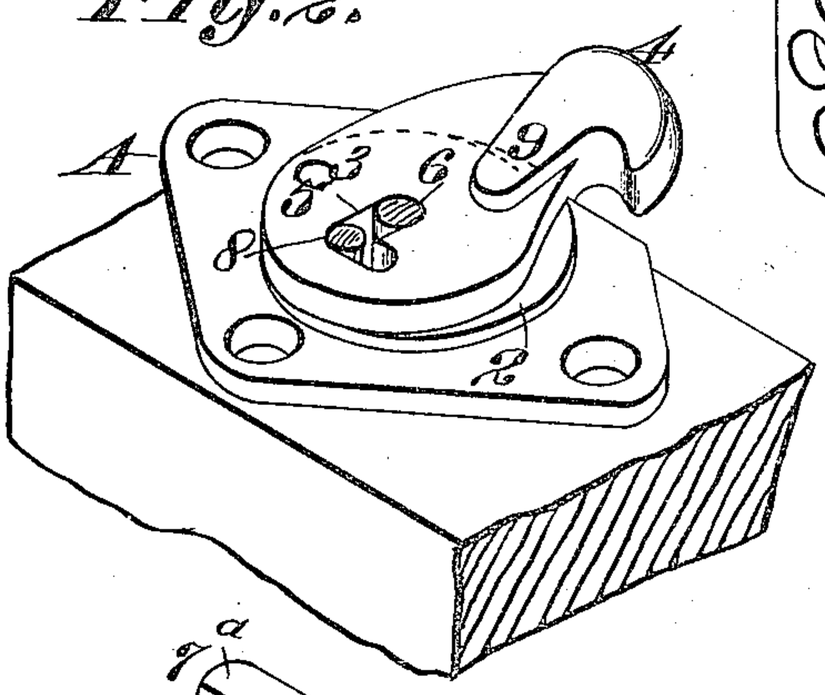


Fig. 6.

Fig. 2.



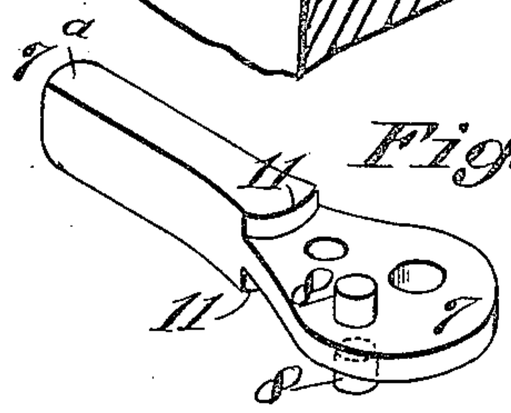


Fig. 4.

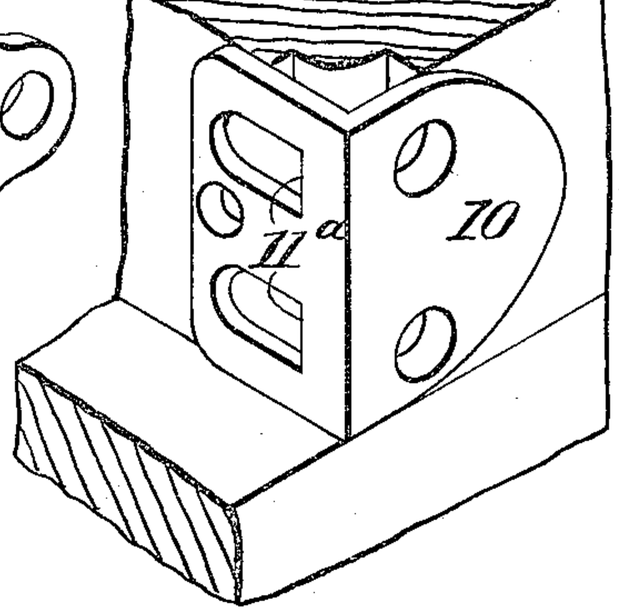
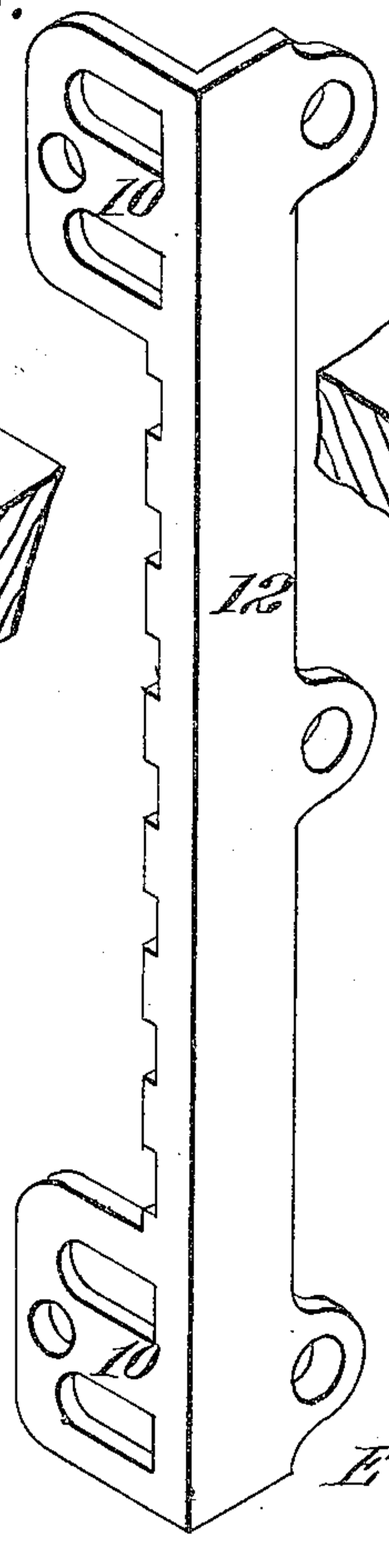


Fig. 5.



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ELLERY M. HOAGLAND, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-FOURTH TO I. J. KOHLER, OF SEATTLE, WASHINGTON, AND ONE-FOURTH TO A. C. HICKS, OF SAN FRANCISCO, CALIFORNIA.

WINDOW-LOCK.

1,154,861. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed March 22, 1915. Serial No. 16,077.

To all whom it may concern:

Be it known that I, ELLERY M. HOAGLAND, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Window-Locks, of which the following is a specification.

My invention relates to a sliding sash window locking device with improvements which are designed to render it as nearly burglar-proof as possible.

It consists of a plate adapted to be fixed upon the top horizontal rail of the lower sash, a hook-shaped, cam-actuated latch adapted to engage coöperating catches on the side of the upper sash, and a lever turnable upon the same center with the latch, said lever being reversible for right and left sides, and having pins, one of which projects into the cam groove of the latch, acting first to turn the latch and afterward engage it with the opposing catch and securely locking it therein.

My invention also comprises details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 shows the application of my lock. Fig. 2 is a perspective view, partially in section, showing the hook-latch cam and the pin upon the actuating lever which engages said cam. Fig. 3 is a bottom view showing the slot in the plate and the raised portion on the latch adapted to engage said slot and lock the parts in place. Fig. 4 is a perspective view of the operating lever. Fig. 5 is a detail perspective view of the catch and sash. Fig. 6 is a modification.

The plate A is adapted to be fixed upon the horizontal top bar of the lower sash of a vertically sliding window. This plate has a raised circular portion 2 which may be formed with a corresponding circular interior recess, within which the inner head of the pivot pin, hereinafter referred to, may be contained.

3 is a plate having a central, segmental portion and an extension to one side thereof terminating in a hook-shaped latch 4. This plate may be reversible so that the device can be applied to either the left or right side of a window, and it has a pivot pin passing through it and into the center of the bearing plate A. This plate 3 has a cam-shaped slot 5 made through it, and this slot forms a cam by which the hook-latch 4 may be turned about a pivot pin 6 which passes through the cam-shaped slot and is fixed in the center of the raised portion 2 of the plate A.

Above the plate 3, and turnable about the same pin 6, is an enlarged flattened portion 7 of the lever 7^a. This part 7 of the lever may be reversed also to coöperate with the reversed hook so that the device may be used upon the right or left side of the window, said lever having pins 8 projecting from the opposite sides of the flattened portion 7. The pin which is lowermost extends into the cam slot 5 and serves to actuate the hook-latch and move it into or out of engagement with the corresponding catch. This hook-latch has the outer portion, which extends beyond the circular raised portion of the bearing plate, formed with thickened sides forming shoulders 9; these shoulders practically forming a continuation of the hook toward the center of the plate. The ends of these shoulders are at such a distance from the center that the one on the lower side will travel in contact with the raised portion 2 of the bearing plate and this serves as a guide to hold the hook in position while it is being turned from an unlocked toward a locking position. Shoulders 11 on the lever act against the cam plate to force the hook into engagement.

The operation of the device will be as follows: The hook-shaped latch being turned by the lever 7^a to a position out of engagement with the catch 10 will allow the window to be freely raised or lowered. In order to engage the hook with the opposed catch 10, the lever may be turned around and the pin in the lever, projecting into the cam-shaped slot in the latch plate, will turn the latter until the hook has entered the slot in the catch 10. When the hook enters the catch, the turning of this plate will be arrested and the end of the lug or thickened portion 9 will be brought into line at that instant with a slot *a* formed in the side of the base plate A. The turning of the lever being continued, the pin which projects into the cam slot 5 will move up the slot, and in doing so will cause the slot in plate 3 to also move upon the center bearing pin

and this draws the hook toward the center and into firm locking engagement with the catch 10. This catch has, preferably, an upturned edge 11ª with which the hook engages so as to make it impossible to remove it without movement of the lever 7ª. In addition to this, the pin 8 which enters the cam slot is carried around to a point beyond the line of the center pivot and the hook extension, so that the lever is practically locked from being accidentally turned.

The catches with which the hook engages may be fixed at intervals along the vertical stile of the sash or there may be a catch fixed at the top and bottom, said catches being connected by an integral bar 12, the edges of which may be notched or serrated, so that the hook-latch may be engaged with these serrations at any point in the length of the bar and the window is thus secured at any point, leaving an opening of any desired size by the sash being firmly locked against any further movement.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:—

1. A window lock consisting of a base plate, a pivot pin thereon, a reversible latch turnably mounted on the pivot pin, said latch having a slot formed therein to receive the pin, a reversible lever turnably mounted on the pivot pin, and a connecting pin on each side of the lever, the pin on the side of the lever nearest the latch engaging in the slot thereof for establishing an operative connection between the latch and lever.

2. A safety lock for sliding sash, comprising a base plate having a raised circular center, a latch plate having a circular portion, a hook extended to one side thereof, said hook having a thickened lug guided and turnable in contact with the raised center, a cam slot formed in the circular portion of said latch plate, a pivot pin about which the latch-plate is turnable, a lever pivoted and turnable upon said central pin, a pin carried by said lever at one side of the pivot pin and engaging with the cam slot in the plate beneath whereby the latch plate is first turned from an unlocked position to a point of engagement with a catch, said lever being provided with a shoulder adapted to act against the periphery of the latch plate to force the hook into engagement with said catch, and a slot in the base plate into which the thickened lug of the latch plate is drawn and locked by the action of the cam.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ELLERY M. HOAGLAND.

Witnesses:
G. H. STRONG,
JOHN H. HERRING.