

A. LEWANDOWSKI.
WINDOW LOCK.
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954,638.

Patented Apr. 12, 1910.

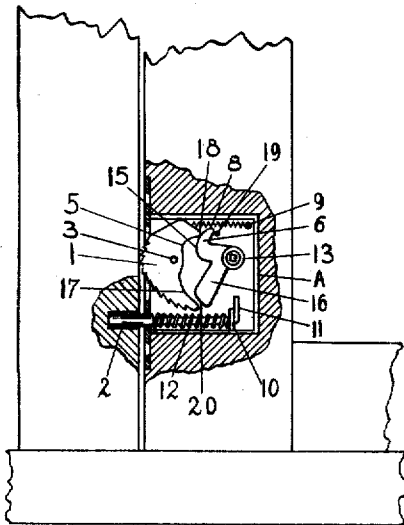


Fig. 2

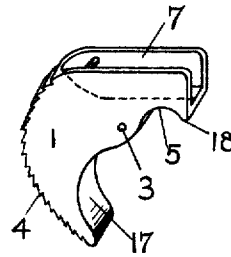


Fig. 3

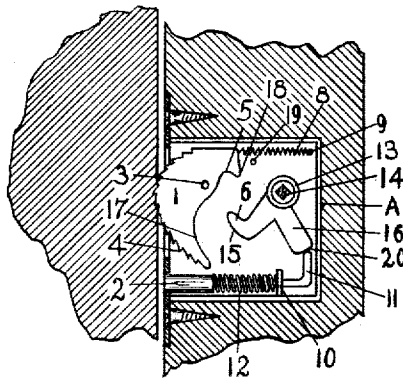


Fig. 1

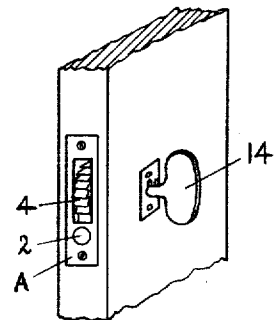


Fig. 4

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WINDOW-LOCK.

954,638.

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To all whom it may concern:

Be it known that I, ANDREW LEWANDOWSKI, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Window-Locks; and I do hereby 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.

My invention relates to improvements in sash locks and holders and is more particularly intended for those sashes which are not provided with balancing weights, although it is applicable to any sash construction balanced or unbalanced.

One object of my invention is the provision of a neat, simple and inexpensive lock of this nature consisting of but few parts not easily liable to get out of order and one which can be applied to windows already in place as well as to new windows, with but a minimum of labor and without weakening the sash.

Another object is the provision of two independent locking means which are alternately controlled and locked in their retracted positions by a single tumbler operated by a key and adapted to oscillate in one direction or the other.

To these ends, therefore, my invention consists in certain novel features and combinations of parts such as will be more fully described hereinafter and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of the lock, showing the positions of the parts when the frictional holding cam is in operation the sash being in raised position, Fig. 2 is a similar view showing the positions of the parts when the locking bolt is in operation the sash being closed, Fig. 3 is a detail view of the cam, and Fig. 4 is a view showing the application of the lock to a window sash.

It will be observed that the lock is small and compact, occupying but little space and it may be applied to both upper and lower sashes.

Referring to the drawings, A indicates the lock casing which contains the frictional holding cam 1, the locking bolt 2 and the single tumbler for actuating the cam and the bolt. The casing is let into the inner face of one stile of the sash in such position that

the cam and lock will engage that portion of the window casing covered by the stile so that the lock is wholly concealed. The frictional holding cam is eccentrically pivoted in the casing as at 3 and is provided with a convex outer face 4, which may be roughened if desired, to increase its frictional engagement with the window casing. A portion of the inner face of the cam is concaved as at 5 and is adapted to be engaged by a hook-shaped projection 6 of the tumbler. A portion of the outer edge of the cam is grooved as at 7, a spring 8 being secured at one end of and lying in the groove, the opposite end of the spring being connected to a post 9 in the lock casing A. The tendency of the spring is to force the roughened face of the cam outward against the window casing.

The bolt 2 lies adjacent the cam, such bolt passing through an apertured stop 10 and having its inner end 11 turned at an angle to the bolt. This inner end, by engaging the stop, limits the outward throw of the bolt, a spring 12 normally tending to throw the bolt outward. In order to retract either the cam or the bolt to inoperative position and to retain them in such position, I provide a tumbler comprising a barrel 13 journaled in the sides of the lock casing A and having a rectangular bore to removably receive a key 14. An angular projection 6 extends from the barrel, the outer face 15 of the point of such angular projection being preferably rounded. A second projection 16 having a cam-shaped outer end extends at substantially right angles to the hooked projection 6, the inner edge of the cam 1 being cut away as at 17 to accommodate the projection 16. When the lower sash is to be raised, the point of the hook lies in the recess 5, the tension of the spring holding the roughened face of the cam projected against the window casing. The cam slides over the window casing as the sash is raised, but as soon as the sash, when released, starts to close, the roughened face of the cam binds against the casing and holds the sash in raised position. In lowering the sash, the cam is held in retracted position until the sash has been lowered to the desired point, whereupon the cam is released to take against the window casing. In order to hold the cam retracted, all that is necessary is to partially rotate the key 14. This rotates the tumbler barrel and causes the point of the hooked projection 6 to en-

gage the concave face of the recess 5 at the inner end of the cam. This operates to swing the cam inward on its pivot and when the cam reaches its inward limit of movement, the curved outer face 15 of the point of the hook rides over the corner 18 of the cam and locks it in withdrawn position against the tension of the spring 8. A stop 19 in the casing limits the rotation of the tumbler in one direction.

It will be understood that the movement of the tumbler as just described, releases the bolt and permits its spring to force it outward into a suitable recess at the lower end of the window casing to lock the window in closed position. There is but one such recess for each sash and that recess is so located (as shown in Fig. 2) that the bolt registers therewith only when the sash is closed. In order to retract the bolt against the tension of its spring 12, the tumbler is rotated in the opposite direction from that described to retract the cam. Such movement of the tumbler brings the cam ended projection 16 against the upturned end 11 of the bolt to withdraw the latter. The continued movement of the projection 16 in the arc of a circle is so arranged that as the bolt is brought to the limit of its inward movement, the upturned end 11 of the bolt rides off the projection 16 and engages the cam end 20 thereof, which locks the bolt in withdrawn position and allows the sash to be raised.

It is obvious that I have devised a most

simple and inexpensive lock having a locking bolt, a holding cam, separate means tending to project the cam and bolt, and a single tumbler for withdrawing either one into the lock casing.

Changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention.

Having thus fully disclosed my invention, what I claim as new, is:—

1. A sash lock and holder comprising a pivotally mounted spring-actuated cam, a sliding spring-actuated bolt independent of the cam, and a single tumbler movable relative to the cam and bolt, adapted to move either the bolt or the cam to inoperative position and to retain them in such position.

2. A sash lock and holder comprising a pivotally mounted spring-actuated cam, a sliding spring-actuated bolt independent of the cam, a single tumbler adapted to move either the bolt or the cam to inoperative position and to retain them in such position, the said tumbler consisting of a rotatable barrel, and two projecting members carried thereby and adapted to engage the bolt and the cam respectively.

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

ANDREW LEWANDOWSKI.

Witnesses:

AUGUSTUS ELIAS,
FRANK ZIELINSKI.