Oct. 6, 1936. M. J. SASGEN ET AL 2,056,488

VENTILATING WINDOW LOCK

Filed Nov. 22, 1934

Fig. 1.

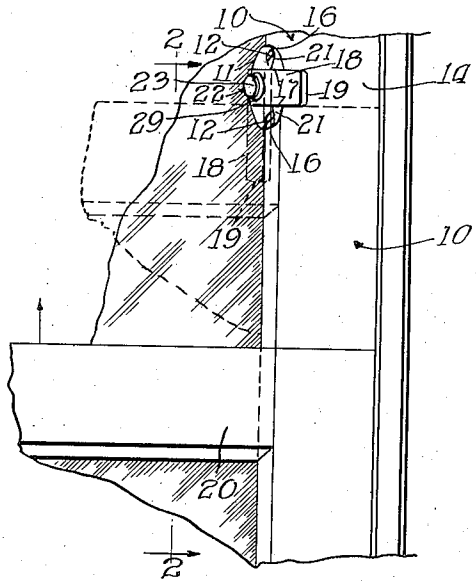


Fig. 2.

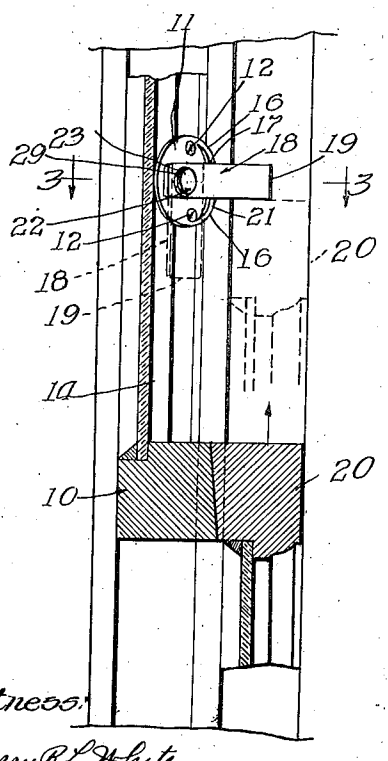


Fig. 3.

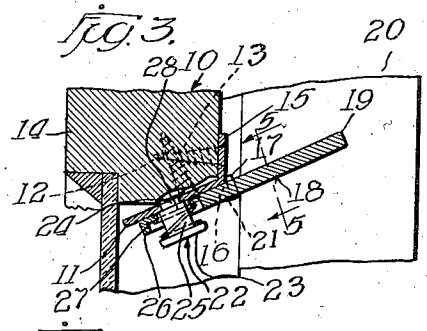


Fig. 4.

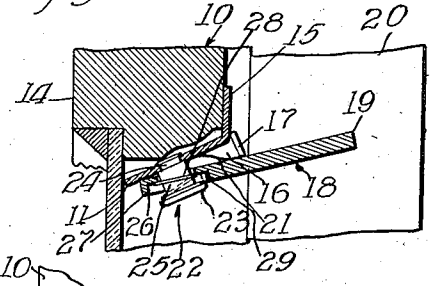
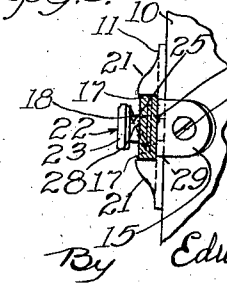


Fig. 5.



Witness:
Harry R. L. White

Inventor:
Michael J. Sasgen
Matthias F. Sasgen.
Louis J. Slapek.
By Edward Jay Wilson
Atty.

Patented Oct. 6, 1936 2,056,488

UNITED STATES PATENT OFFICE

2,056,488

VENTILATING WINDOW LOCK

Michael J. Sasgen, Matthias F. Sasgen, and Louis J. Sladek, Chicago, Ill.; said Matthias F. Sasgen and said Sladek assignors to said Michael J. Sasgen

Application November 22, 1934, Serial No. 754,274

4 Claims. (Cl. 292—202)

This invention relates to improvements in window locks and has special reference to window locks which are adapted to permit either the upper or the lower window sash to be opened a limited amount for ventilation.

Important objects of the invention are, to provide a lock of the character mentioned which shall be simple and sturdy in construction; which can be easily applied to a window; which can be used either on the right hand side or the left hand side; and which can readily be set in window locking condition, or in non-operative condition, in which latter condition the window may be freely opened to any extent desired.

The invention resides in a window lock having a base adapted to be secured to a side bar of an upper window sash at a suitable height above the meeting rails of the two window sash, and a locking lever pivotally mounted on the base to swing out into the path of the lower sash and means on the base for retaining the locking lever in locking position. The lever retaining means includes rigid abutments on the base between which the locking lever is received and means for yieldingly holding the locking lever between the abutments.

The invention will be more readily understood from the following description taken in conjunction with the accompanying drawing, forming part of this specification, and also with the appended claims which formally define the invention.

In the accompanying drawing a preferred form of the invention is illustrated but it should be understood that the invention is not limited to the specific construction shown except within the scope of said claims.

In said drawing:—

Fig. 1 is a front, fragmentary elevation of a pair of window sash with a window lock embodying the invention fixed on the upper sash;

Fig. 2 is a vertical, fragmentary section on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary, horizontal section on the line 3—3 of Fig. 2, showing the locking lever in locking position;

Fig. 4 is a sectional view similar to Fig. 3, but showing the locking lever released and ready to be swung around out of locking position; and

Fig. 5 is a vertical section on the line 5—5 of Fig. 3.

The lock, as shown in the drawing, is adapted to be secured to the upper sash 10 of a pair of vertically movable sash and so arranged as to permit the relative movement of the sash for a determined distance to open the window for purposes of ventilation.

The lock consists of a base 11 provided with holes for receiving fastening screws 12 and 13. The side bar 14 of the sash frame upon which the base is secured is usually formed somewhat inclined at its inner edge where the base 11 is secured and the base is provided at one side with a tongue 15 which can readily be bent to fit flatly against the inner face of the side bar 14 as best shown in Figs. 3 and 4, and is provided with a hole to receive the fastening screw 13. The base proper fits against the inclined edge of the side bar 14 and is provided with two vertically spaced holes to receive the other fastening screws as best shown in Fig. 2.

The form of the base to fit around the inner corner of the side bar 14 and the fact that it is secured by screws entering the side bar at different angles affords a very strong mounting of the base upon the sash and one which will withstand any reasonable force applied to cause it to give way. Between the screws 12 the edge of the base is turned up as shown at 16 to form opposed abutment shoulders 17. The metal of the base is extended between the shoulders 17 to form the tongue 15.

A locking lever 18 is pivotally mounted on the base to swing parallel thereto and is adapted to be received between the opposed shoulders 17. The inclination of the base to the sash causes the free end 19 of the lever 18 to project inwardly over the lower sash 20 of the window and in position to engage same when the sash are moved toward each other, either the upper sash being lowered or the lower sash being raised.

It will readily be understood that the device can be used either on the right hand side or the left hand side of the upper sash, whichever is more convenient as in each application the topmost shoulder 17 acts as the locking stop.

The turned up edge portions 16 of the base have their free edges 21 inclined to the base to form cams for lifting the lever 18, as it is swung around to enter between the shoulders 17.

The lever 18 as has been said is pivotally mounted at one end upon the base to swing around in a plane parallel thereto to place it in locking position between the shoulders 17 and to place it in a non-locking position. This mounting, in the form of device shown, consists of a stud 22 projecting inwardly from the base 11 and provided on its free end with a head 23.

The inner end of the stud is made smaller in diameter than the body 25 thereof to provide a

shoulder for contact with the base and the stud is secured by riveting over the inner end of the smaller end 24 of the stud.

The inner end 26 of the lever 18 is provided with an opening 27 slightly larger than the body 25 of the stud to permit the inclination of the lever on the stud in entering it between the shoulders 17 and lifting it out again.

A compression spring 28 is arranged on the body of the stud between the inner end 26 of the lever and the head 23 of the stud to yieldingly hold the lever pressed against the base plate 11. The hole 27 in the inner end of the lever is enlarged as shown at 29, to receive and center the inner end of the spring 28.

It will be noticed that the shoulders 17 are arranged between the lever pivot 22 and the free end of the lever 18 and substantially midway between these points thus providing a device for the purpose which is as rigid and strong as possible to withstand any force applied to open the window more than the device will permit.

The peculiar mounting of the lever on the base not only allows the lever to be readily swung into and out of locking position, but also serves to frictionally retain the lever in any position it is swung to when in unlocking position as for instance in the downwardly hanging position as shown in dotted lines in Figs. 1 and 2.

It sometimes requires quite a pull on the free end of the locking lever 18 to lift it and free it from the locking shoulders, when it is desired to swing it around to non-operative position, and the tongue 15 and the fastening screw 13 have been arranged in horizontal alignment with the lever 15 to best withstand this pull. Without this inner fastening screw 13 the unlocking of the lever would tend to put too severe a strain on the securing screws 12 which would tend to loosen the device from the window frame. Furthermore the stud 22, which forms the pivot upon which the locking lever 15 is mounted, is arranged beyond the vertical line connecting the fastening screws 12 so that these screws are positioned between the pivot of the lever and the locking shoulders 17 and consequently the screws 12 are in the best position to resist any force which may be applied to the free end of the lever to open the window beyond the point permitted by the lever when in locking position.

It will now be understood that I have provided a very simple strong window lock, which can be readily manufactured at a relatively low cost, which can be applied with equal results to either the right or left side of a window, and which can be very strongly secured in place by the securing screws to resist any unwanted force applied to the window sash.

As many modifications of the invention will readily suggest themselves to one skilled in the art, we do not limit or confine the invention to the specific details of construction and operation herein shown and described except within the scope of the appended claims.

We claim:

1. In a device of the kind described, a base adapted to be secured to the side bar of a window sash, a pivot pin secured to said base, a locking lever pivotally mounted adjacent one end on said pivot pin, locking shoulders on said base between which said lever is positioned when in window-locking position, said lever being substantially parallel to said base but being so mounted on said pivot pin that its forward end portion may be swung away from said base to permit said forward end portion to pass over said shoulders while the rear end of said lever remains in contact with said base.

2. A window stop of the kind described comprising a base adapted to be secured to the side bar of an upper window sash, a locking lever pivotally mounted on said base to swing substantially parallel to said base and to be projected into the path of a lower sash, opposed shoulders on said base between which said locking lever is adapted to be positioned when arranged to project in the path of the lower sash, the shoulders being provided with camming surfaces engaged by said lever as it is swung around to locking position to enable said lever to pass over said surfaces and between said opposed shoulders, the rear end of said lever remaining in contact with said base during the swinging movement of said lever, and means for yieldably retaining said lever in position between said shoulders.

3. In a device of the kind described, a base adapted to be secured to the side bar of a window sash in a position at an inclination to the plane of the sash, a pivot pin secured to said base, a locking lever pivotally mounted adjacent one end on said pivot pin, locking shoulders on said base between which said lever is positioned when in window-locking position, a camming surface on said base, said lever being substantially parallel to said base but being so mounted on said pivot pin that its forward end portion, engaging said camming surface, may be swung away from said base to permit said forward end portion to pass over said shoulder while the rear end of said lever remains in contact with said base, and means for yieldably retaining said lever in adjusted position.

4. In a device of the kind described, a base adapted to be secured to the side bar of a window sash, a locking lever having an aperture adjacent one end thereof, a pivot pin on said base extending through said aperture, locking shoulders on said base between which said lever is held when in window-locking position, said lever being substantially parallel to said base but being so mounted on said pivot pin that its apertured end remains in contact with said base while its opposite end is swung away from said base to pass over one of said shoulders when being placed between said shoulders, and a spring bearing on said lever adjacent said pivot pin for holding said lever in adjusted position horizontally, between said shoulders, or vertically, free of said shoulders.

MICHAEL J. SASGEN.
MATTHIAS F. SASGEN.
LOUIS J. SLADEK.