J. W. COOK.

LOCK FOR SCREENS.

APPLICATION FILED APR. 6, 1911.

1,066,799. Patented July 8, 1913.

FIG. 1

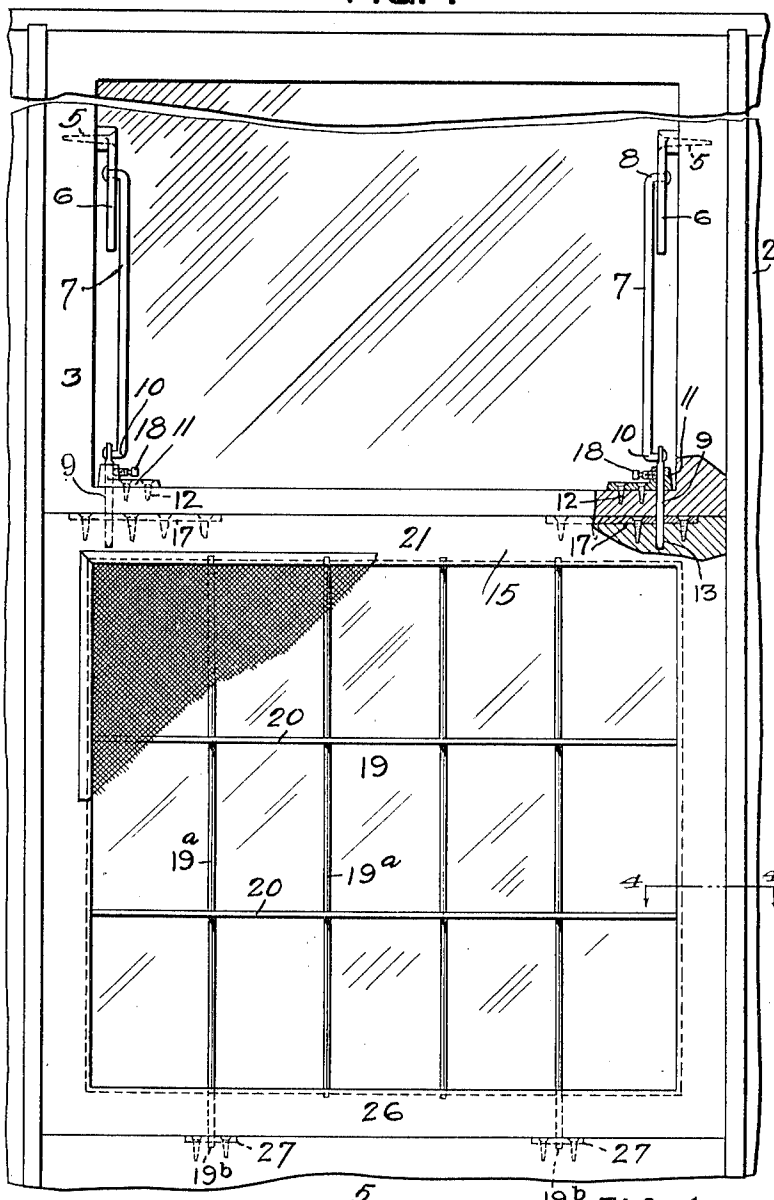


FIG. 2

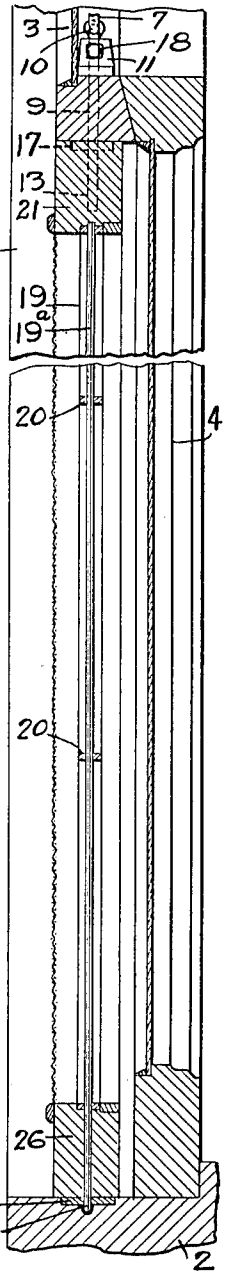


FIG. 3

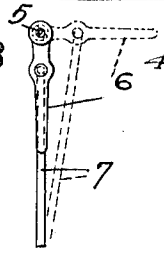
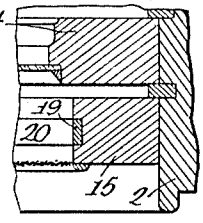


FIG. 4.



WITNESSES.

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LOCK FOR SCREENS.

1,066,799. Specification of Letters Patent. Patented July 8, 1913.

Application filed April 6, 1911. Serial No. 619,424.

To all whom it may concern:

Be it known that I, JOHN W. COOK, a citizen of the United States, resident of Avalon, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Locks for Screens; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to window screens and means for securing the same in position.

The object of my invention is to provide a screen which will not only exclude flies and other insects, but at the same time guard against the entrance of thieves where the lower sash is raised for purposes of ventilation.

A further object of my invention is also to provide a screen which can be locked in place so that it will be impossible to raise the screen, to guard against delirious persons or inmates of asylums or hospitals from jumping out of the window.

To these ends my invention comprises the novel features hereinafter set forth and claimed.

In the drawing, Figure 1 is a face view of a window showing my improved screen adjusted thereto; Fig. 2 is an enlarged vertical section of a portion of the window; Fig. 3 is a detail of the fastening device for holding the screen in position; and Fig. 4 is a section on the line 4—4 Fig. 1.

In the drawing the numeral 2 designates the frame of the window containing the upper and lower sashes 3 and 4.

Secured to the upper sash by the screws 5 at each side and mounted to turn on said screws are the levers 6. Pivotally connected to the levers 6 are the rods 7, the upper ends of said rods being bent as at 8 to pass through openings in the levers 6 whereupon the rivet heads are formed on the ends of said rods to secure said rods to the levers 6. The lower ends of the rods 7 are connected to the locking bolts 9. The lower ends of the rods 7 are turned inwardly as at 10 and pass through openings in the bolts 9 when the rivet heads are formed on said rods to unite them to the bolts 9. The bolts 9 pass down through the guides 11 secured to the upper sash by the screws 12 and said bolts pass through openings in the sash and down into the recesses 13 formed in the screen 15. The screen fits snugly within the frame of the window as clearly indicated in Fig. 4, so that it may be readily inserted or removed therefrom. The plates 17 are secured to the screen 15, said plates having openings through which the bolts 9 pass.

It will be apparent from the above that by swinging the levers 6 around into the position indicated in dotted lines Fig. 3, the rods 7 will be raised and with them the bolts 9 so as to release the screen from the upper sash. When, however, the levers 6 are down in a position parallel with the rods 7, the bolts 9 will securely lock the screen to the upper sash so that any one from without will not be able to remove the screen 15. Furthermore, the upper sash cannot, of course, be lowered as it rests directly upon the screen 15. To prevent the raising of the bolts 9, the set-screws 18 may be employed which engage the guides 11 and when said screws are tightened up, they lock the bolts 9 in position, so that the bolts will be held against vertical movement and the levers 6 cannot be moved to lift the rod 7. These set-screws will be used in cases where the screens are employed in the windows of hospitals or asylums where it is desired to lock the screen from the inside so as to prevent it being raised. When the set-screws 18 are once screwed up tight, it will be practically impossible to turn them by hand and a wrench or other instrument for turning them would be in possession of the attendant or nurse.

The screen 15 is provided with the grill 19 which, in the present case, is composed of the round wires 19^a and the flat bars 20, said wires 19 passing through openings in said flat bars. The wires 19 pass up into the upper cross piece 21 of the screen and the flat bars 20 are secured to the upright members of the screen. One or more of the vertical wires 19^a extend down through the lower cross member 26 of the screen and the projecting portions 19^b are adapted to enter the sockets 27 secured in the window frame or sill. When the screen is locked in this way the lower sash may be raised to the full extent and no one from the outside can open the screen, while at the same time the grill 18 forms a protection which adds to the security, as any attempt to destroy or cut said grill would be accompanied with sufficient noise to waken the occupant of the room and

give the alarm. On the other hand, if the screen is employed in connection with hospitals or asylums, the screen when once locked precludes the possibility of a patient jumping from the window as the key or wrench for releasing the set-screws 18 will be in the possession of the nurse or attendant and any effort to open the screen without such key would be futile. The screen is readily adjusted into the window frame.

It will be seen that by my construction the lower sash can be raised to any desired height without moving or disturbing the screen as it is connected only with the upper sash, thus allowing for ventilation to any desired extent, by the ordinary use of the lower sash which can be moved to any height desired. But the screen is firmly held between the sill of the window frame and the upper sash and cannot be withdrawn until the bolts passing through the lower part of the upper sash are raised. The screen is, therefore, firmly held in place between the sill and the upper sash and prevents access through the window from the outside, and in case of use in hospitals prevents removal of the screen by a patient within the room. By having the upper sash fit down onto the upper cross piece of the screen, water cannot get down between the screen and the lower sash, and a much neater appearance is given to the window. I desire to include within the scope of my invention various changes and modifications in the construction illustrated and included within the broad scope of my invention.

What I claim is:

1. The combination with a window-frame, of a screen, an upper sash, a vertical bolt carried by the upper sash adapted to engage the screen and means for raising and lowering said bolt.

2. The combination with a window-frame, of a screen, an upper sash, a vertically movable bolt carried by the upper sash adapted to engage said screen, a rod connected to said bolt, and means for raising and lowering said rod.

3. The combination with a suitable window-frame, of a screen, an upper sash, a vertically movable bolt on the upper sash adapted to engage said screen, a rod connected to said bolt, and a lever pivotally mounted in said upper sash to which said rod is attached.

4. The combination with a suitable window-frame, of a screen, an upper sash, a vertically movable bolt in the upper sash, a guide on said sash through which said bolt passes, means for raising and lowering said bolt, and means for locking said bolt in said guide.

In testimony whereof, I the said JOHN W. COOK have hereunto set my hand.

JOHN W. COOK.

Witnesses:

ROBT. D. TOTTEN,

ALICE M. GODFREY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."