

J. HANNA.
WINDOW SCREEN.

APPLICATION FILED FEB. 24, 1910.

1,011,428.

Patented Dec. 12, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

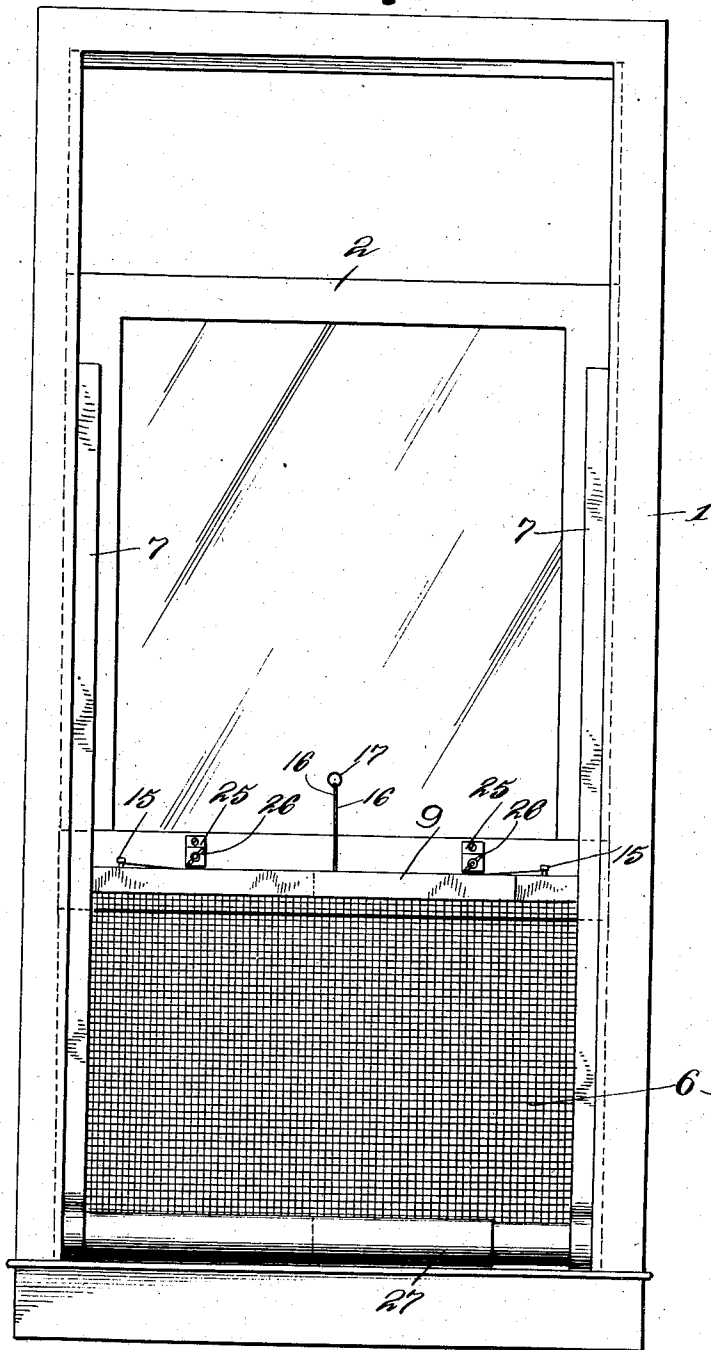
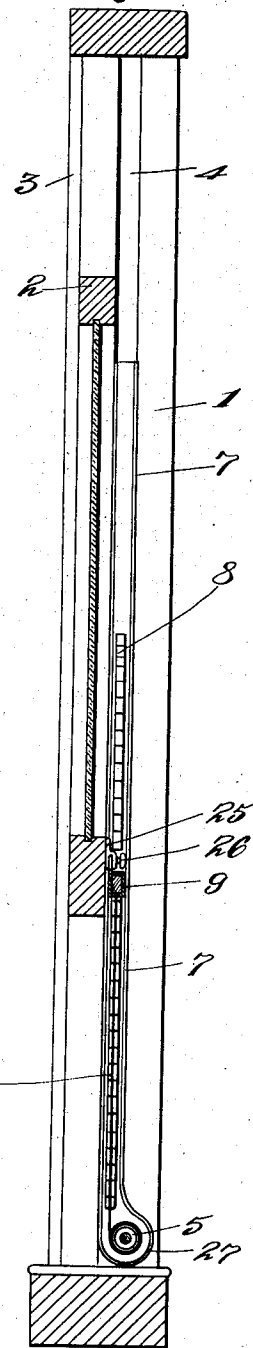


Fig. 2.



Witnesses:
Campbell Heebig
Bernard Blaccon

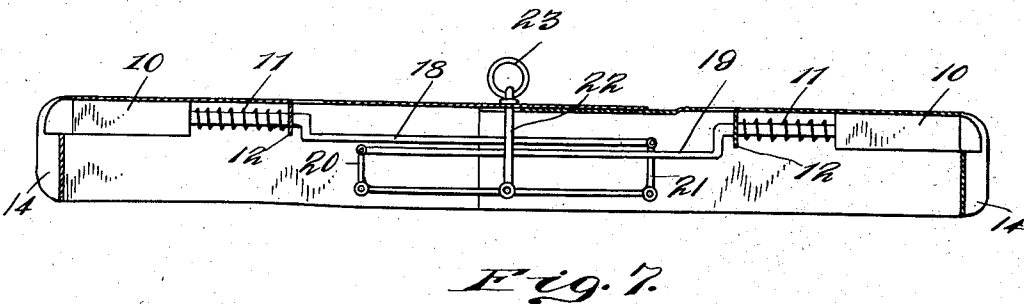
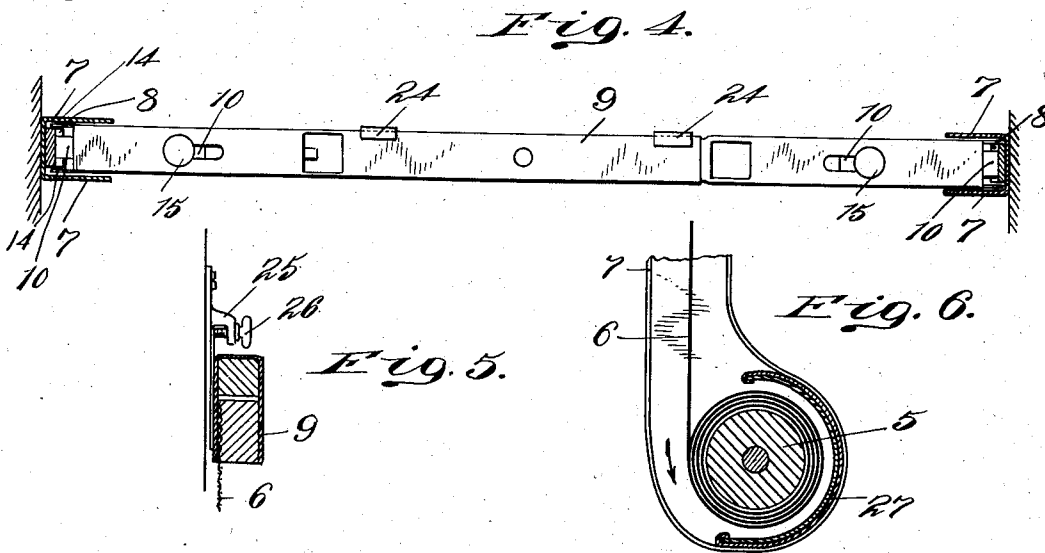
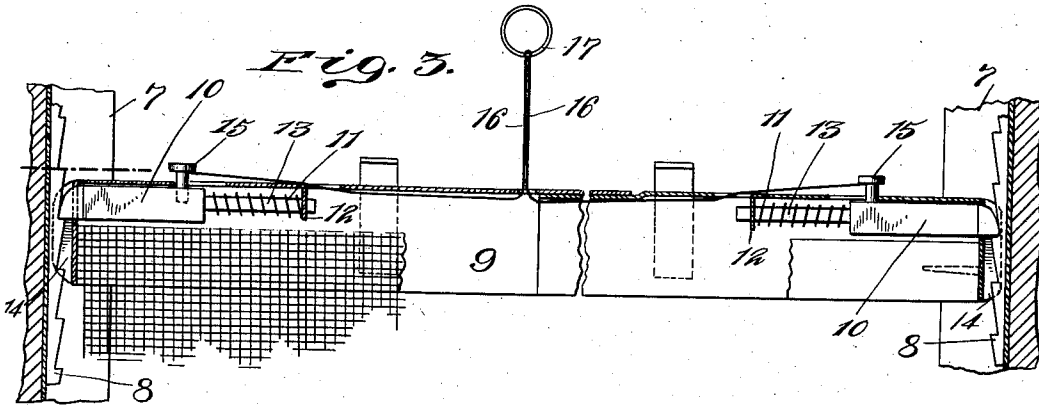
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2 SHEETS—SHEET 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JULIUS HANNA, OF FISHKILL LANDING, NEW YORK.

WINDOW-SCREEN.

1,011,428.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed February 24, 1910. Serial No. 545,570.

To all whom it may concern:

Be it known that I, JULIUS HANNA, a citizen of the United States, residing at Fishkill Landing, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Window-Screens, of which the following is a full, clear, and exact specification.

My invention relates to certain new and useful improvements in window screens, and especially to adjustable screens combined with a window catch for holding a window sash weights, in any desired position.

The object has been to provide a simple and satisfactory construction which will serve the purposes intended and be, at the same time, inexpensive of construction, readily attachable to window frames, and easily disconnected from the window without removal from the window frame.

Other objects of my invention will be readily understood from the following specification, and in the accompanying drawings which illustrate one form of my invention, Figure 1 is a front elevation of a window equipped with my construction; and Fig. 2 is a section taken through the center of Fig. 1. Fig. 3 is a longitudinal section of the screen bar showing the mechanism for holding the window in the adjusted position. Fig. 4 is a top plan view of the same. Fig. 5 is a detail section showing the means for connecting the screen bar to the window sash. Fig. 6 is a section through the screen and roller; and Fig. 7 is a longitudinal section of a modified form of screen bar and catch-operating mechanism.

Like reference numerals indicate corresponding parts in all the drawings.

In these drawings the numeral 1 indicates a window frame of usual character, having the usual sash 2, sliding between the retaining-strips 3 and 4, in the usual manner. At the lower end of the frame is secured a roller 5, upon which is wound the screen 6, which may be of any suitable flexible material. The roller is spring-operated and normally tends to wind up in the direction of the arrow indicated in Fig. 6. Upward movement of the screen takes place against the resistance of this spring.

Upon the window-retaining-strips 4, are secured the screen-bar-guides 7, shown con-

sisting of U-shaped channel members. Within the channels are located suitable racks 8, with which the catches of the screen-bar are adapted to engage. The roller 5 is connected to the frame formed by the channel members and is readily detached therewith from the window frame. These racks may be in the form shown, or merely points or projections struck up at the desired intervals from the bottom of the channel member 7, or of some other suitable character.

The upper end of the screen is shown secured to the screen-bar 9, which is preferably of metal, and hollow, in order to contain the catch or window-holding mechanism. This may be of some suitable character, and in Fig. 3 I have shown one such mechanism wherein catches 10, provided with stems 11, are adapted to slide horizontally in suitable guides 12, springs 13 being located upon the stems 11 and being adapted normally to force the catches outwardly.

The sides of the ends of the screen bar, which are indicated by the numeral 14, are flexible and, when the bar is in place, are adapted to engage the inner sides of the channel member 7, and they may also be adapted to engage the base of the racks 8. Such double engagement is shown in Fig. 4, the object being to prevent rattling of the bar in its travel up and down with the window sash.

Operating mechanism may be provided for retracting the catches 10. For instance, in Fig. 3 I have shown thumb-pieces 15, and for simplifying the operation, said thumb-pieces may be connected by cords 16, 16, with a ring 17.

A modified form of operating mechanism is illustrated in Fig. 7 and will be readily understood. The catches 10 are connected by arms 18 and 19 to bell-crank-levers 20 and 21, the longer arms of which are connected to a rod 22, having an operating ring 23.

The screen-bar 9 is provided with projecting lugs or securing-pieces 24; and upon the lower portion of the window sash, hangers 25 are provided, having thumb-screws 26 therein, whereby, when the lugs 24 are slid under the hangers and the screws tightened up, the screen-bar is firmly attached to the window sash and moves therewith.

An adjustable cover 27 is provided for

the roller 5, and serves to keep the same from accidental disturbance or injury.

The operation of the device will be readily understood from the foregoing. When the roller, screen, and guides are in place and the screen-bar securely attached to the window-sash, any lifting of the window causes the screen to be pulled up therewith and the opening thus to be effectively screened. Upon the upward movement of the sash the catches ride over the racks freely, but when the window is open to the desired extent, the spring-operated catches engage said racks and hold the window and screen firmly in place. To release the same it is only necessary to pull up upon the ring 17 or 23, as the case may be, which automatically retracts both of the catches, and so long as they are held in this retracted position the window may be moved up or down freely, the roller automatically winding up the screen thereon. Should it be desirable to raise the window without operating the screen, all that is necessary is to loosen the thumb-screws 26, releasing the lugs 24, and thus disconnect the screen-bar from the window-sash. Such disconnection will release the window-sash from the screen and the catches which are largely supplied for hold-

ing the window-sash against the retractive action of the roller spring.

It is obvious that many modifications and changes may be made in my invention without departing from the spirit thereof, and I do not mean to limit myself to the exact form shown and described, but

What I claim and desire to secure by Letters Patent is:

In a device of the character specified, the combination with a flexible screen, of a screen-bar secured to one end of said screen, spring-pressed catches carried by the screen bar and movable longitudinally thereof, screen-bar guides provided with channels for embracing the ends of said screen-bar, a rack located in each said channel for the engagement of the catches, and flexible members carried by the ends of the screen-bars at each side of the catches for engaging the inner sides of the channels and the bases of the racks, substantially as and for the purposes specified.

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

JULIUS HANNA.

Witnesses:

JAMES M. DE GARMO,
F. C. FROST.