No. 851,498. PATENTED APR. 23, 1907.

M. G. CROSBY.

SAFETY WINDOW SCREEN.

APPLICATION FILED SEPT. 17, 1906.

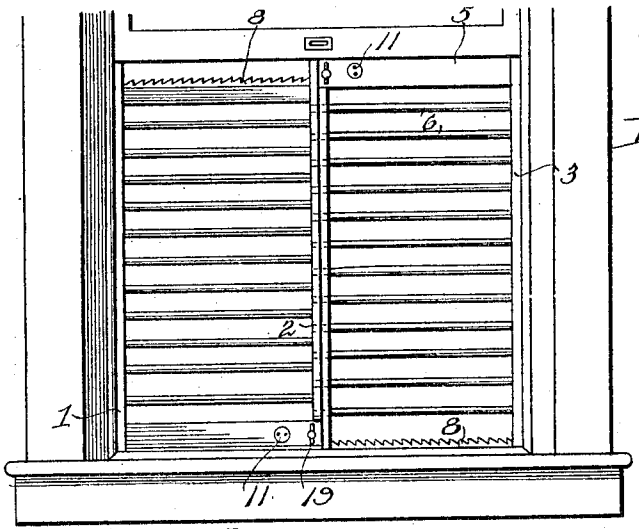


Fig. 1

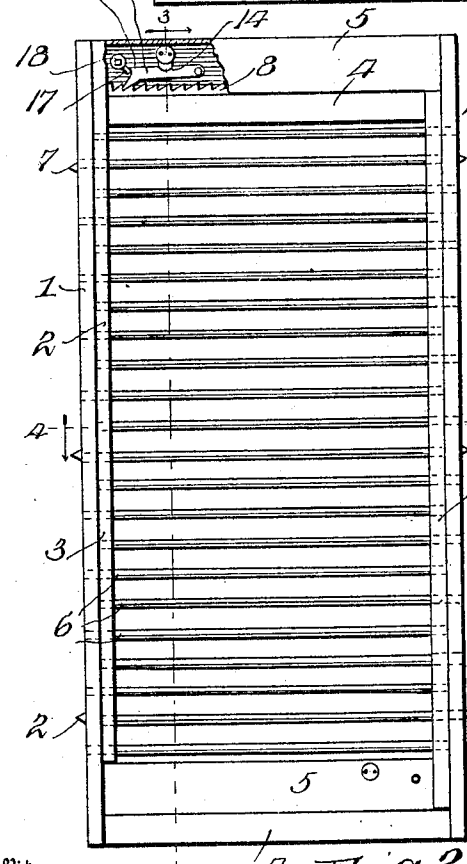


Fig. 2



Fig. 3.

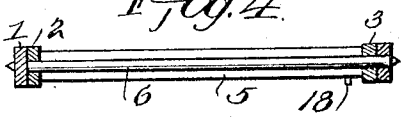


Fig. 4.

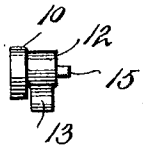


Fig. 5.

Witnesses

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SAFETY WINDOW-SCREEN.

No. 851,498. Specification of Letters Patent. Patented April 23, 1907.

Application filed September 17, 1906. Serial No. 334,827.

To all whom it may concern:

Be it known that I, MATTHEW G. CROSBY, a citizen of the United States of America, residing at Palestine, in the county of Anderson and State of Texas, have invented new and useful Improvements in Safety Window-Screens, of which the following is a specification.

This invention relates to a safety window screen, its object being to provide a screen which is adjustable for different sized windows and is provided with means for fastening the same to the window frame and locking the sections thereof in adjusted position, so as to effectually prevent the entrance of unauthorized persons into the house when a sash is opened for ventilation.

In the accompanying drawings,—Figure 1 is an inner elevation of the lower portion of a window frame, showing the application of the invention. Fig. 2 is an inner elevation of the folded screen, a portion being broken away to show one of the locking devices. Fig. 3 is a vertical front to rear section through the screen on line 3—3 of Fig. 2. Fig. 4 is a horizontal section thereof on line 4—4 of Fig. 2. Fig. 5 is a detail of one of the locking devices.

The screen is of the adjustable type, and consists of grated sections 1 and 2, each section comprising a pair of side rails 3, top and bottom rails 4 and 5 and spaced bars or grate rods 6 connecting the side rails between said top and bottom rails, the parts being preferably constructed of metal of the requisite strength. Each section is provided upon the outer rail thereof with spurs 7 adapted to be embedded in the jambs of the window frame when the screen sections are extended to hold the screen securely in applied position against vertical and inward and outward movement through the opening in the window frame. The side rails of the section 2 are arranged to slide upon the grate bars of the section 1, thus permitting said sections, to have relative inward and outward movement to adjust the screen for application to windows varying in width.

Means are provided upon the top and bottom rails of the two screen sections to lock said sections in relatively adjusted position, such locking means being duplicates in construction, so that a description of one will, except as to the arrangement of the same, will suffice for both. The upper rail 4 of the section 2 is provided with a longitudinal row of rack teeth 8, while the adjacent rail 5 of the section 1 carries a locking pawl or dog 9 to engage said rack teeth. The rail 5 is of channeled form which incloses and slidably engages the teeth 8 and forms a casing or housing for the pawl 9. The said pawl is pivotally mounted within the housing, and its toothed portion is properly inclined to engage the rack teeth, which latter are inclined properly to ride over the teeth and permit outward adjustment of the section 2 upon the section 1 and to engage said teeth and lock said section 2 against inward movement.

A locking device is provided to hold the pawl in locking position, the same comprising a rotary head 10 journaled in an opening in the inner wall or plate of the rail 5 and provided with recesses 11 to receive bits or projections upon a suitable form of key. The head 10 carries a tumbler 12 from which projects a locking lug or tongue 13 adapted to enter a recess 14 in the upper edge of the pawl to hold the same in engagement with the ratchet teeth. From the tumbler extends a journal 15 mounted in a suitable bearing opening in the outer wall or plate of the rail 5, thus revolubly mounting the locking device so that it may be turned by the key to throw the lug 13 into and out of engagement with the pawl. The pawl is provided at its free end with a shoulder 16 adapted to be engaged by a bit 17 on a rotary retracting device 18 journaled in the rail 5 and provided upon the inner side of the latter with an operating knob or finger piece 19. By this construction it will be seen that when the pawl is in locking position the screen sections will be held extended, thus preventing any person from the exterior opening or removing the screen to gain access to the house through the window. Upon swinging the locking device out of engagement with the pawl the latter may be lifted and retracted by the bit 17 upon turning the finger piece 19, thus releasing the sections from locking engagement so that the spring can be folded or collapsed for removal or other purposes.

I have not deemed it necessary to show the internal construction of the locking means upon the bottom rails of the screen section, it being only necessary to state that the rack 8 in this instance is formed upon the lower rail of the section 1, while the locking dog and cooperating parts are formed upon the channeled bottom rail of the section 2. It

will be seen that the means for controlling the locking and retracting devices are located upon the inner faces of the channeled rail sections 5 and consequently cannot be manipulated from the exterior.

In Fig. 1 I have shown the screen arranged to close the lower portion of the window frame opening when the bottom sash is raised, and it will be understood that by constructing the screen of metal or other suitably strong material the screen can only be destroyed or removed by breaking or cutting therethrough, an operation which cannot be carried out without alarming the occupants of the house. I do not limit the invention to the present specific disclosure, as any equivalent construction may be employed. By the use of the screen one of the sashes of the window may be opened for purposes of ventilation during warm weather with perfect safety against the liability of entrance of intruders, as the screen will form a guard covering the space left vacant by the opened sash.

Having thus described the invention, what is claimed as new, is:—

1. An adjustable window screen comprising slidably connected sections, a rack upon the top rail of one section and bottom rail of the other section, a pawl upon the bottom rail of the first named section and top rail of the other section to engage the racks, casings upon the pawl supporting portions of the sections inclosing the pawls and adapted to slidably receive the racks, and means supported by the casings for retracting the pawls, said means being accessible from the inner side of said casings.

2. An adjustable window screen comprising slidably connected sections, one of said sections having a rack and the other a pawl thereon to engage the rack, a casing enclosing the pawl and rack, and means for locking and retracting the pawl, said means being accessible only from the inner side of the screen.

3. An adjustable window screen comprising slidably connected sections, a rack upon one of the sections, an enclosed pawl upon the other section to engage said rack and lock the screen sections in adjusted position, and means located on the inner side of the screen for controlling the pawl.

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

MATTHEW G. CROSBY.

Witnesses:
J. W. HENRY,
H. W. STEDMAN.