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C. M. HADDOX

SCREEN FASTENER AND PROTECTOR

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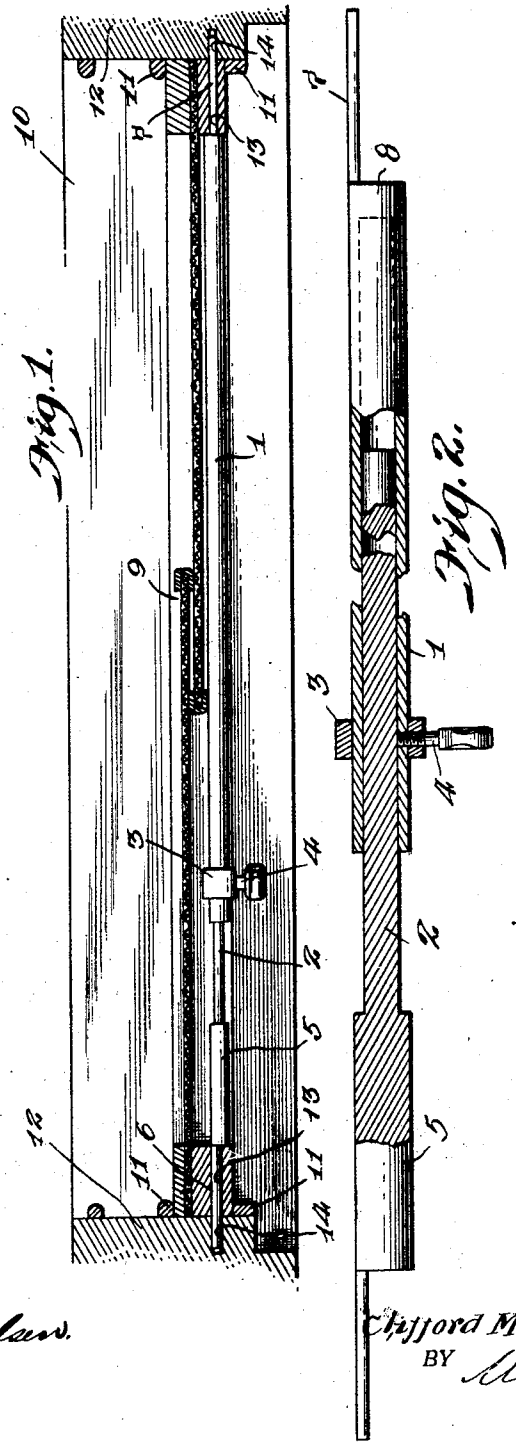


Fig. 1.

Fig. 2.

WITNESSES

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SCREEN FASTENER AND PROTECTOR.

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To all whom it may concern:

Be it known that I, CLIFFORD M. HADDOX, a citizen of the United States, and resident of Charleston, in the county of Kanawha and State of West Virginia, have invented certain new and useful Improvements in Screen Fasteners and Protectors, of which the following is a specification.

My invention relates to window screen fasteners and protectors, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of the invention is to provide a simple, inexpensive and highly efficient device for holding an extensible window screen locked in applied position in a window frame.

A further object of the invention is to provide a device of the character described which is adapted to lock a window screen to the frame of a window in which the screen is placed so that the screen cannot be removed intact, from the outer side of the window, thus preventing an unauthorized person from gaining entrance to the interior of a building in which the window is provided by removing the screen from the window without breaking the screen.

A still further object of the invention is to provide a device of the character described which is adjustable for use in holding screens of various widths within a considerable range of sizes in window frames.

Other objects and advantages will be apparent from the following description, considered in conjunction with the accompanying drawings, in which

Figure 1 is a view showing a fastener and protector embodying the invention in position to lock a window screen in position in a window frame, the fastener and protector being shown in plan and the window frame and screen being shown in horizontal section,

Figure 2 is a relatively enlarged plan view of the fastener and protector with portions thereof broken away and other portions shown in section.

A device embodying the invention as illustrated in Figures 1 and 2 has an elongated body extensible in length and comprising a tubular section 1 open at one end for the reception of an end of a second section 2 of the body. The sections 1 and 2 are in sliding engagement so that the length of the portion of the section 2 which is engaged in the bore of the section 1 may be varied to adjust the effective length of the body of the device within a considerable range as desired. A collar 3 is secured on the section 1 adjacent to the open end of the latter. A radial opening is formed in the collar and through the underlying portion of the section 1 and is threadedly engaged by the shank of a set or thumb screw 4 which may be manipulated to tighten the inner end of the shank against the portion of the section 2 which is received within the section 1 and the sections 1 and 2 thus locked together in adjusted position in respect to each other.

The section 2 preferably is enlarged adjacent to its outer end, as at 5 so that the enlarged portion 5 corresponds substantially in cross sectional contour and area to the section 1. A locking pin 6 extends from the marginal portion of the outer end of the portion 5 of the section 2 in parallel relation to the axis of the section 2. The locking pin 6 may be integral with the section 2 or may be a separate element rigidly secured to the section 2 in any suitable known manner. The section 1 is provided with a locking pin 7 which extends from the marginal portion of the outer end of the section 1 so that the pins 6 and 7 may be arranged in axial alignment with each other by securing the sections 1 and 2 together and to the position illustrated in Figure 2.

The section 1 preferably is closed at its outer end, as at 8, by an end wall which may be integral with the side walls of the section so that the locking pin 7 will be securely braced at its inner end.

The sections 1 and 2 and the locking pins 6 and 7 may be made of any suitable material and any desirable size.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The device is designed to be positioned inwardly of the screen material of a window screen which may be of ordinary rigid construction or may be an extensible window screen of ordinary construction as indicated at 9 in Figure 1. The greatest application of the device will be to window screens of the extensible type of construction since such window screens are more likely to be accidentally displaced or removed from the outer side of the window by a person gaining entrance

improperly into a dwelling house than the usual rigid window screens which are more permanently secured to the window frames. An extensible window screen ordinarily is placed within a window frame, such as that indicated at 10 in Figure 1 with the side bars of the window frame received in the guideways which are defined by adjacent vertical guide strips 11 in conjunction with the window jambs 12 to which said strips are secured. In order to remove the window screen from the window frame, it is only necessary to collapse the window screen or in other words to slide the sections thereof in respect to each other until the side members of the window screen frame have been moved inwardly beyond the inner edges of the guide strips 11. As is well known, window screens of the extensible type of construction frequently are displaced from window frames because of accidental collapse thereof and many accidents occur because of objects and persons, principally small children, falling from a window from which the window screen was displaced when the weight of the object or person was imposed against the inner side of the screen. Of course, the frame of an extensible screen could be secured by nails to the window frame but this is objectionable since convenient and facile removal and replacement of the window screen to permit lowering and raising of the window sashes when desired or for any other cause would be precluded and moreover the securing of the screen frame to the window frame by means of nails or like fastening elements would tend to mar and damage the window frame.

When a fastener and protector embodying the invention and as illustrated in Figures 1 and 2 is employed, horizontally aligned openings 13 are formed through the side members of the window screen frame and sockets or openings 14 are formed in the window jambs in position to register with the openings 13 when the window screen is in applied position in the window frame, as shown in Figure 1. The openings 13—14 are adapted for the reception of the locking pins at the opposite ends of the body of the device. The locking pin at one end of the body of the device is inserted through one of the openings 13 into the associated opening or socket 14 until the adjacent end of the body of the device is in abutting relation to the inner face of one of the side members of the screen frame.

The body of the device then is adjusted in length until the locking pin at the other end of the body is extended through the other opening 13 into the opening or socket 14 at the other side of the window to position the second end of the body of the device in abutting relation to the outer face of the adjacent side member of the screen frame. The locking pins at the ends of the body of the device preferably are of less length than the openings or sockets 13—14 so that the extension of the body when in the locking position in respect to the screen frame will be limited because of the engagement of the ends of the sections 1 and 2 with the side members of the screen frame and the end walls of such sections of the device thus serve as stop shoulders or walls and the locking pins not only are braced because of the engagement of the ends of the body of the device with the side members of the screen frame but no undue pressure is placed on the inner ends or bottom of the sockets 14. The sections 1 and 2 of the body of the device are locked to each other through the use of a set or thumb screw 4 when the body of the device has been adjusted in length as desired to effect the locking of an extensible screen in a window frame of a given width. The window screen thus will be securely held against collapse and against accidental displacement from the window frame. Also, it will be manifest that the screen frame cannot be displaced by any person from the outside of the window unless the window screen is broken or damaged to an extent necessary to permit manipulation of the thumb or set screw of the device by the person at the outer side of the window.

Obviously, my invention is susceptible of embodiment in forms other than those illustrated in the accompanying drawings, and I therefore consider as my own all modifications and adaptations of the forms of the device herein described as fairly fall within the scope of the appended claims.

I claim:—

1. A device for holding an extensible window screen against collapse from applied position in the window frame, comprising a body extensible to vary the length thereof and provided with reduced pin extensions at the outer ends thereof for insertion through aligned openings in the side members of the screen frame into openings in the side members of the window frame, said pin extensions extending in the direction of length of said body in eccentric relation to the body.

2. A device of the character described, a tubular section open at one end, a rod like section slidably received at one end in the bore of the tubular section, a collar carried by the tubular section in engagement with the open end thereof, a securing screw threaded through aligned openings in said collar and said tubular section for engagement with the inserted portion of said rod-like section to lock said sections together, and pin extensions at the outer ends of said sections, said pin extensions being of less area in cross section than the adjacent portions of the sections of said body and ex-

tending from the marginal portions of the outer ends of the sections, in eccentric relation to said sections.

3. A device of the character described, a tubular section open at one end, a rod like section slidably received at one end in the bore of the tubular section, a collar carried by the tubular section in engagement with the open end thereof, a securing screw threaded through aligned openings in said collar and said tubular section for engagement with the inserted portion of said rod-like section to lock said sections together, and pin extensions at the outer ends of said sections, said pin extensions being of less area in cross section than the adjacent portions of the sections of said body and extending from the marginal portions of the outer ends of the sections in eccentric relation to the sections, said rod-like section being enlarged adjacent to its outer end to correspond in cross sectional area and contour to said tubular section.

CLIFFORD M. HADDOX.