C. ELLIS.

WINDOW, SCREEN, AND SASH LOCKER.

APPLICATION FILED OCT. 4, 1916.

1,360,628.

Patented Nov. 30, 1920.

3 SHEETS—SHEET 1.

Fig. 1.

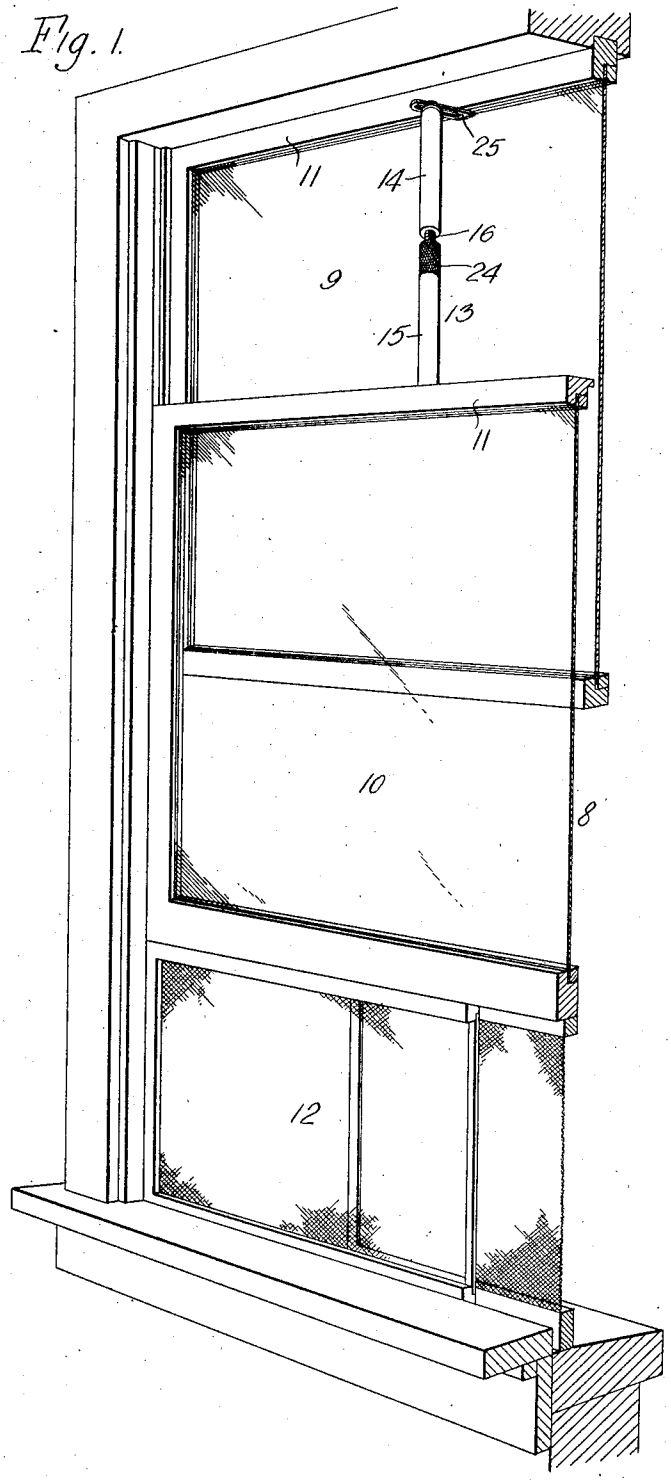
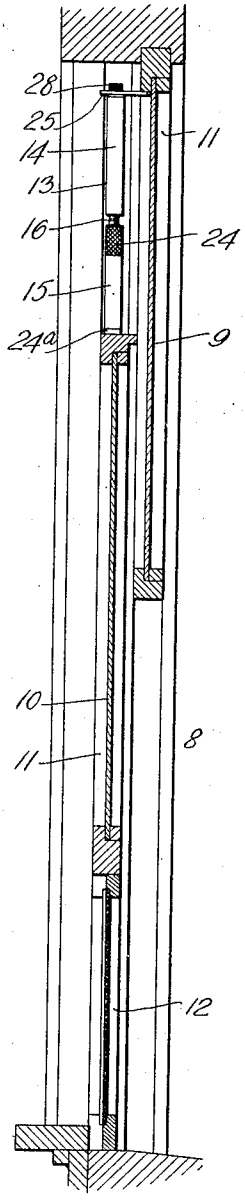


Fig. 2.



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3 SHEETS—SHEET 2.

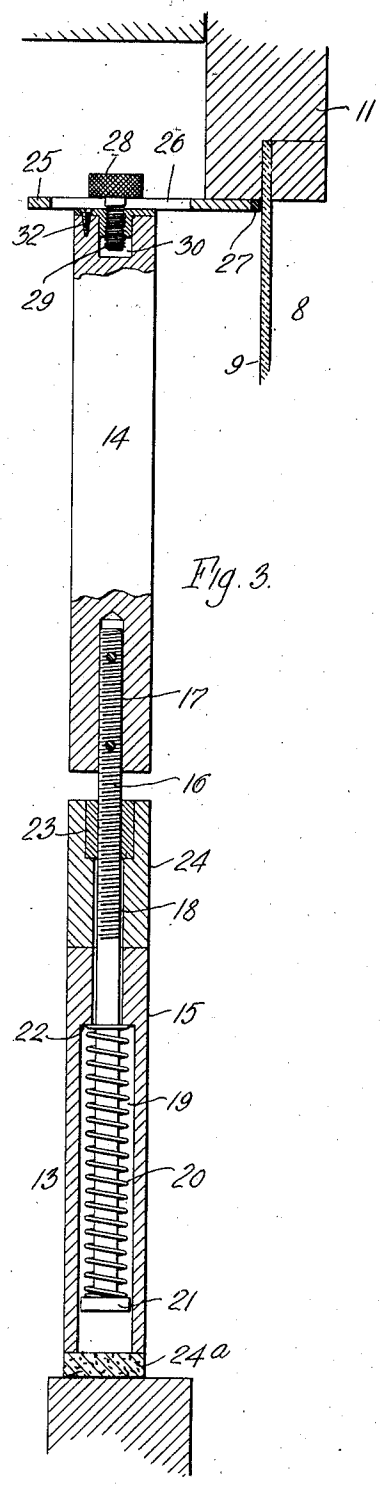


Fig. 3.

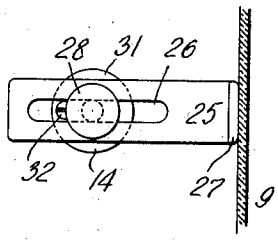


Fig. 4.

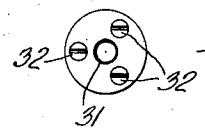


Fig. 5.

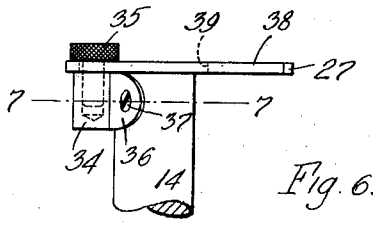


Fig. 6.

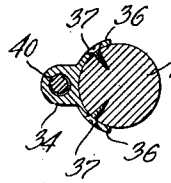


Fig. 7.

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3 SHEETS—SHEET 3.

Fig. 8.

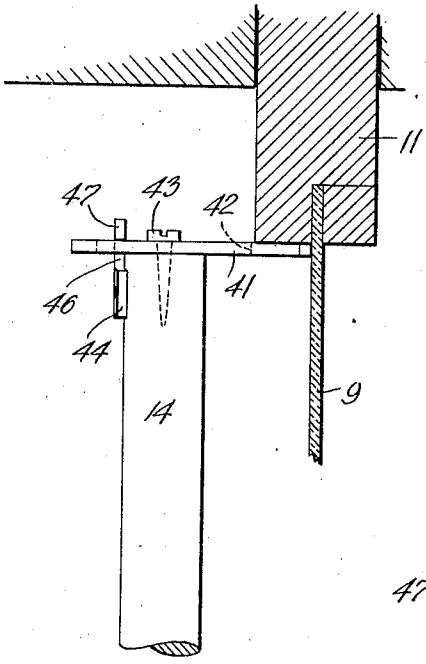


Fig. 9.

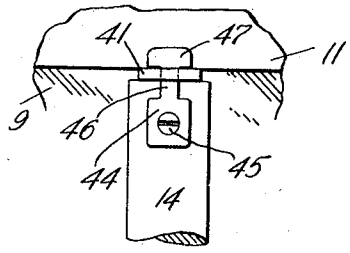
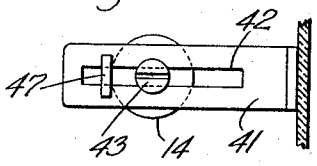


Fig. 10.



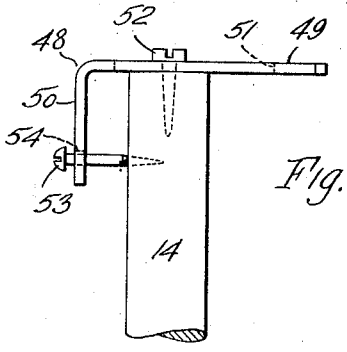


Fig. 11.

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UNITED STATES PATENT OFFICE.

CLAUDE ELLIS, OF SPRINGVILLE, NEW YORK.

WINDOW, SCREEN, AND SASH LOCKER.

1,360,628. Specification of Letters Patent. Patented Nov. 30, 1920.

Application filed October 4, 1916. Serial No. 123,667.

To all whom it may concern:

Be it known that I, CLAUDE ELLIS, a citizen of the United States, residing at Springville, in the county of Erie and State of New York, have invented a new and useful Improvement in Window, Screen, and Sash Lockers, of which the following is a specification.

This invention relates to window sash and screen locks or fasteners of the general type set out and claimed in United States Letters Patent No. 1,168,491 of Jan. 18, 1916, and has for its object to produce a safe and portable lock for window sashes and screens of varying sizes, which is of simple construction, contains but few parts and is readily and cheaply manufactured.

In the accompanying drawings:—

Figure 1 is a sectional perspective view of a window provided with a sash and screen lock embodying the invention, the screen being placed beneath the partially raised lower sash and both sashes and the screen locked in position.

Fig. 2 is a sectional elevation on a reduced scale thereof.

Fig. 3 is a side elevation partly in section on an enlarged scale, of the device in locking position as applied to an ordinary window.

Fig. 4 is a top plan view showing the adjustable locking bracket and thumb nut.

Fig. 5 is a plan view of the receiving socket for the thumb nut.

Fig. 6 is a side elevation, partly in section, of a modification of the device.

Fig. 7 is a section taken on line 7—7, Fig. 6.

Fig. 8 is a side elevation, in locking position, of another modification of the device.

Fig. 9 is a rear elevation thereof.

Fig. 10 is a top plan view thereof.

Fig. 11 is a side elevation of still another modified form.

8 represents a window of ordinary construction having sliding sashes 9 and 10 provided with window frames 11 in the usual manner. As shown in Figs. 1 and 2 the lower sash 10 is raised to admit a wire screen 12, which is placed in position beneath the lower sash with its ends extending into the sash guideways in the casing. These parts may all be of any ordinary and well known construction. The screen shown is one of the extensible sort adapted to fit windows of different widths.

13 represents the adjustable window and sash locking device, which is adapted to be used with windows of varying sizes and which as shown, has a locking device embodying the present invention mounted at the upper extremity thereof, as is hereinafter fully described.

This adjustable device 13 may be of any suitable construction. As shown, it comprises the upper and lower bar or rod sections 14 and 15 which are joined by means of a screw or bolt 16, the ends of which extend into suitable recesses 17 and 18 formed in said sections.

The lower portion of the recess 18 is enlarged to form a spring chamber 19 in which is located a coil spring 20 which encircles the lower portion of bolt 16. The bolt is provided with a head 21 and the spring 20 is ordinarily compressed between the head and a shoulder 22. As the recess 18 is slightly greater in diameter than the bolt the section 13 may move relatively in respect thereto.

Suitable means for adjusting the rod sections 14 and 15 vertically in respect to each other are provided. As shown, such means comprise an adjusting nut 23 which is secured in a suitable cylinder 24, but any other suitable adjusting means may be used if desired. A cork or rubber disk 24^a is secured at the bottom of the rod section 15 so that when the device is placed in position the woodwork will not be marred.

The preferred form of locking device which is mounted at the upper end of rod section 14 is shown clearly in Fig. 3. This device comprises an arm or bracket 25 containing an opening or slot 26 therein, and is preferably constructed of metal and rectangular in outline, although any other suitable material and shape may be used therefor, if desired. The bracket is preferably provided with a cork or rubber tip 27 which is adapted to bear against the window glass. By means of such arrangement the bracket is horizontally adjustable relatively to the rail and can be used with window sashes of various sizes.

A thumb screw comprising a head 28 and a threaded shaft 29 is adapted to pass through the slot 26 of the bracket, the shaft 29 of the screw being of such a diameter as to pass freely through said slot. 30 is a recess or socket formed in the upper end of rod section 14, and adapted to receive a metallic bushing 31 which is preferably flanged and secured to the top of the rod

section 14 by means of screws 32, or in any other suitable manner. This bushing is screw-threaded and the shaft 29 of the thumb screw is adapted to enter therein. By this construction the bracket 25 is readily adjustable horizontally relatively to the rod section, so as to adapt it to be used with window sashes of varying sizes. At the same time the bracket can be securely locked in any desired position by adjustment of the thumb screw.

If desired, the bracket can be secured directly to the end of the rod, by means of a screw which passes through slot 26 of the bracket and enters the end of the rod.

In the modification shown in Figs. 6 and 7, a threaded socket 34 adapted to receive the shaft 40 of the thumb screw 35 is secured to the side of the upper extremity of the rod member 14. As shown, such socket is provided with the two extension flanges 36 which project on opposite sides of the rod and are secured thereto in some suitable manner as by screws 37. 38 is a bracket which is provided with a slot 39 therein, through which shaft 40 of thumb screw 35 passes. This shaft is also threaded and enters socket 34 in the same manner as in the preferred construction so that the bracket is adjustable relatively to the rod section. The socket for the thumb screw is preferably mounted on the rod at the side opposite to the window frame so that the bracket extends across the top of the rod section which constitutes a bearing surface, thus materially increasing the strength of the device.

In the modification of the locking device shown in Figs. 8, 9 and 10, 41 represents a bracket provided with a slot 42, the bracket being of similar construction to the brackets 25 and 38 shown in Figs. 4 and 6. The bracket is secured to the end of rod section 14 by any suitable means, a screw 43 preferably being used to lock the bracket in adjusted position. 44 is a metallic plate which is suitably secured to the upper side of rod member 14, preferably by a screw 45, as shown. This plate comprises a vertically extending arm 46 having a knob-like projection or boss 47 at the upper extremity thereof. The arm 46 is adapted to pass through slot 42 of bracket 41 and the projection 47 serves to keep bracket 41 in a plane parallel to that of the top of rod member 14, and at the same time to allow the bracket to be adjusted relatively to the rod section.

In the modification shown in Fig. 11, 48 represents a bracket comprising two arms or faces 49 and 50 which extend at right angles to each other, and the upper one of which is provided with a slot 51. A screw 52 passes through said slot and enters the end of rod section 14, thus serving to secure the bracket in place on the rod. By loosening the screw the position of the bracket relatively to the rod section can be changed as desired. The security of the bracket is increased by means of screw 53 which passes through a hole 54 in the perpendicular arm or face 50 of the bracket and enters the side of rod section 14. By this construction the stability of the bracket is increased and its adjustability is not impaired.

If desired any other suitable means for fastening the brackets to the top of the rod section 14 may be employed, if the same results are accomplished thereby.

The bracket may also be constructed without a slot, having one or more screw holes in place thereof. In such event, however, the range of adaptability of the bracket will be limited.

In operation the device can be used in connection with windows and screens of varying sizes. The various modifications of the device shown and described operate on substantially the same principles and it will be sufficient to describe the operation of the preferred form. As shown in Fig. 1 of the drawings, the lower sash 10 of the window is raised and the screen 12 inserted underneath the sash. The device is then placed in position so that the lower extremity of the section 15 rests on top of the raised lower sash while the upper end of section 14 is slightly below the bottom face of the top rail of the upper sash. The bracket or arm 25 is then placed in position underneath said rail and in contact therewith with the tip 27 of the bracket bearing lightly against the window pane. By means of the adjusting nut 23 the two rod sections are then adjusted so that the upper surface of the bracket bears firmly against the bottom face of the top rail of the sash. The lateral distance through which the bracket extends from the upper rod section as heretofore mentioned is regulated by the thumbscrew 28, and when such distance is fixed on, the thumb screw can be tightened and the bracket held securely in the desired position, thus locking both the upper and lower sashes and the screen securely until the device is detached from the inside of the window.

To unlock and detach the device in order to remove the screen or change the position of the sashes, it is only necessary to draw the rod sections closer together by the adjusting means provided, thus shortening the device and allowing its ready removal from the window without injury to the woodwork, sash and casings.

As can be readily understood, the device can be used with equal facility to lock a screen in place above the lowered upper window. In such case the lower extremity of the device rests on top of the lower sash and the bracket 25 is placed underneath and

in contact with the lower face of the top rail of the upper sash, the adjusting means between the rod sections being utilized to properly position the parts.

I claim as my invention:

1. In a sash fastener, the combination of two bar sections arranged end to end, the lower of said sections being adapted to engage the lower sash, a pad of yielding material at the lower end of said lower section, a screwthreaded part arranged at the end of one of said sections and having a screwthreaded engagement with said other section for varying the length of said fastener, a spring for yieldingly holding said screwthreaded part in its adjusted position, and a substantially flat locking arm secured to the upper extremity of said upper bar section and extending laterally in a direction to engage the upper window sash and adjustable transversely of said bar section, and having its flat faces arranged in a substantially horizontal plane.

2. In a sash fastener, the combination of two bar sections of substantially the same cross section arranged end to end, the lower of said sections being adapted to engage the lower sash, a pad of yielding material at the lower end of said lower section, a screwthreaded stem arranged at the end of one of said sections, a nut arranged at the end of the other section with which said stem engages for varying the length of said fastener, a spring arranged within said other section and engaging said stem to hold said nut in engagement with said other section, a laterally extending arm secured to the upper extremity of said upper bar section and extending in a direction to engage the upper window sash and having a slot, and means extending through said slot for adjustably securing said arm to the end of said bar section to permit said locking device to be adjusted laterally with regard to said bar section.

Witness my hand and seal this 3rd day of October, 1916.

CLAUDE ELLIS. [L. S.]

Witnesses:

CLAYTON J. ELLIS,

EMERALD J. BECKERICH.