R. T. MURPHY.
SASH FASTENER.

No. 299,246.  Patented May 27, 1884.

WITNESSES:

INVENTOR
Robert T. Murphy

BY
O. E. Duff

ATTORNEY
To all whom it may concern:

Be it known that I, ROBERT T. MURPHY, of Westminster, in the county of Oconee and State of South Carolina, have invented certain new and useful Improvements in Sash Locks and Holders; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to automatic devices for locking the sashes of windows when closed, and also operating to catch and maintain the same at intermediate points when opened, in such manner that they cannot be moved in either direction until operated upon.

It has for its object to supply a device so simplified in form and construction that its cost of manufacture is reduced to a minimum, thereby relieving a long-felt want in this class of inventions.

The invention consists in the form and construction of the devices, together with their combination one with the other, substantially as will hereinafter appear and be claimed.

Fig. 1 represents a vertical front elevation of a window-sash, partly broken away, in which my improvement is embodied. Fig. 2 is a vertical sectional elevation thereof on the line x x. Figs. 3, 4, and 5 represent, respectively, detail views of the upper and lower buttons separately and combined, to more clearly show their construction and operation.

Referring to the annexed sheet of drawings,

Attached to the inner side of the frame, on a common pivot, are two swinging buttons, a b, their point of attachment to the frame being at such a height or elevation as to bring the top edge of the upper button, a, on a line with the upper edge of the lower sash when said button is swung up or elevated. Such button is slightly the heaviest. Both have a shank portion, a' a", in which the hole is made by which they are pivoted to a pin or screw in the frame. The hole a' in the upper one is elongated, as shown, for the purpose hereinafter described. The shank portion a" of the lower button, b, is of elliptical contour, so as to permit the projecting ridge or shoulder c, formed with button a, to move or turn against its edge, in order that such lower button may be thrown out from the sash when button a is turned upward.

C represents cleats on the sash, which are at such distances apart as to cause, when the sash has been partly opened, a button to become engaged therewith upon the exertion of a force in either direction.

e is a pin in the frame, which prevents the lower button from flying out too far when the weight of the upper one is relieved from it.

The operation is as follows: To raise the sash, turn the button a upward and let it rest against the stile. The moment the lower button, b, is relieved of the weight of a it swings, by gravity, away from the sash, thus unlocking it. The sash is then raised to the desired elevation, the button a meanwhile yielding to each cleat that passes it until the desired height has been attained. When the elevating force is released, button a, having slipped under a cleat, locks the sash. The weight of the sash on a, which, as will now be understood, is resting by its shoulder on the upper end of the shank of b, forces button b back against the sash, immediately over a cleat, thereby preventing said sash from being forced up, in like manner as button a prevents it from being lowered. When desired to lower the sash, button a is swung outward and allowed to drop against b, to hold it against the sash immediately over a cleat, thus securely locking the sash when down.

It will be seen that by providing the shank of the upper button with the elongated hole the shoulder on said button is made free to be passed around the edge of the shank of the lower one, which would not be the case if such hole were not elongated, as the button a could not be turned upward against the sash without turning b with it. In such latter instance the devices would not prevent movement of the sash in both directions, but would only serve in one way. Neither in this latter case would the devices be as near in approach to
automatic action as in the present instance, for they would have to be turned up or down with one hand simultaneously with the action of opening or closing the sash with the other, thus necessitating the use of both hands at once. The portion of the shank of $b$ that extends from its point of pivot is of greater length than the portions at the side of such pivotal point, thus forming, as it were, a lever of said button, such portion of greatest length beyond the pivot being the shorter arm and its remaining portion of length being the longer. The power applied to it outward and downward in a line perpendicular thereto, through the medium of $a$, tends to throw the end of its longest arm against the sash.

I am aware that it is not new to provide window-sashes with cleats which are engaged by gravitating latches or buttons placed upon the frame, or vice versa.

I am further aware that varied forms of such gravitating latches have been heretofore employed, by which the sashes are maintained at any elevation to which they may be drawn, and securely locked by the same when closed; but I am not aware of such construction of devices as herein described and claimed ever having been known prior to my present invention.

Having thus described my invention, what I claim is—

In sash-holders, the combination, with button $a$, provided with the elongated hole in its shank and formed with the shoulder $c$, of the button $b$, formed with the elliptical shank, on which the shoulder $c$ turns and rests, each of said buttons being on a pivot in the frame that is common to both.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ROBT. T. MURPHY.

Witnesses:

R. F. WHITE,

H. B. ZIMMERMAN.