

(No Model.)

J. WELDON.
SASH HOLDER.

No. 526,764.

Patented Oct. 2, 1894.

Fig. 1.

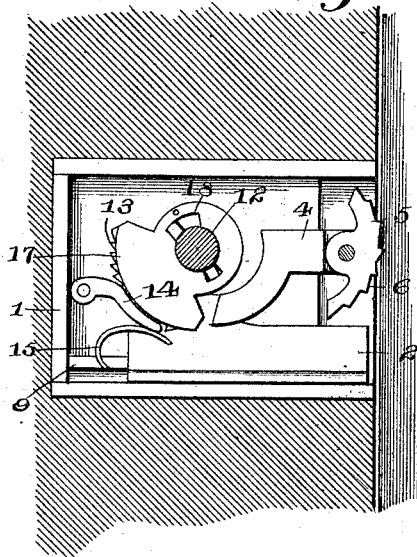


Fig. 2.

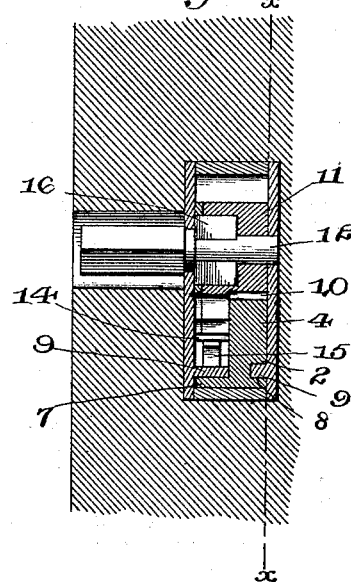


Fig. 3.

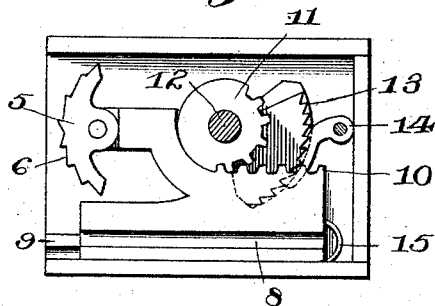


Fig. 4.

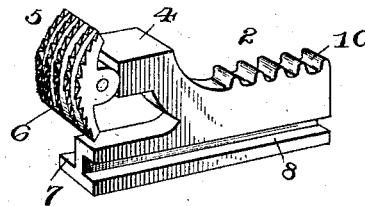


Fig. 5.

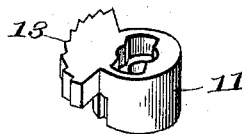


Fig. 6.

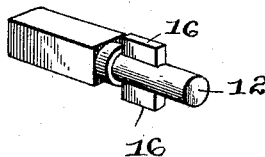


Fig. 7.

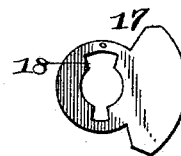


Fig. 8.



Josiah Weldon,

Inventor

Witnesses

C. A. Ford
J. H. Wiley

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOSIAH WELDON, OF ELMORE, OHIO.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 526,764, dated October 2, 1894.

Application filed March 7, 1894. Serial No. 502,746. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH WELDON, a citizen of the United States, residing at Elmore, in the county of Ottawa and State of Ohio, have invented a new and useful Sash-Holder, of which the following is a specification.

The invention relates to improvements in sash holders.

The object of the present invention is to improve the construction of sash-holders, and to provide a simple and inexpensive one, which will be adapted to be readily applied to a window, and which will be positive and reliable in operation, and capable of securely holding a sash at any desired adjustment.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a vertical sectional view of a sash holder, constructed in accordance with this invention, and shown applied to a window. Fig. 2 is a transverse sectional view. Fig. 3 is a vertical sectional view on line *x—x* of Fig. 2. Fig. 4 is a detail perspective view of the bolt. Fig. 5 is a similar view of the mutilated gear wheel. Fig. 6 is a detail view of the spindle. Fig. 7 is a plan view of the segmental plate. Fig. 8 is a detail view of the pawl.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a casing, inserted in a mortise of a window frame and having its outer end open to permit a sliding bolt 2, which is housed within the casing to engage a sash 3, whereby the latter is securely held at any desired adjustment. The sliding bolt is provided with a curved arm 4 having an outwardly extending portion arranged parallel with the body of the bolt, and having pivotally attached to it a cam head 5. The cam head 5 is provided on its inner face with perforated ears, between which is secured a reduced portion of the arm 4. The outer engaging convex face of the cam head 5 is provided with integral oppositely disposed teeth 6 having their outer ends shouldered. The upper teeth are adapted to prevent the sash from accidentally falling, and the lower teeth are ca-

pable of preventing the sash from being raised.

The body of the bolt is provided at one side with a flange 7, and at its opposite side with a groove 8; and the casing is provided with a pair of flanges 9, which fit in the groove of the bolt and against the flange 7, and serve as guides for the bolt. The bolt is provided at the inner side of its body with a series of teeth 10, forming a rack, and meshing with a mutilated gear wheel 11, which actuates the bolt. The gear wheel 11 is mounted on a spindle 12, and is provided with an integral toothed segment 13, adapted to engage a toothed pawl 14 to prevent accidental rotation of the gear wheel, and consequent inward movement of the bolt, which would result in releasing the sash. The pawl is pivoted at its inner or rear end, and has its main portion slightly curved to conform to the periphery of the segment, and its engaging face is provided with teeth corresponding with those of the segment, and shouldered to engage the same. A spring 15 engages the back of the pawl and holds it against the segment.

The spindle is provided with opposite lugs 16 and the gear wheel is provided with an opening corresponding with the spindle, whereby when the spindle is turned the gear-wheel is carried with the same. The opening of the gear wheel is slightly larger at the extensions which receive the lugs 16 than the latter, to permit a slight movement of the gear wheel independent of the movement of the spindle; and a segmental plate 17, provided with an opening 18 is pivoted to the gear wheel adjacent to the toothed segment thereof. The opening of the segmental plate corresponds with that of the gear wheel, but is slightly larger than the same, and when the segmental plate, which has a limited movement independent of the gear wheel, is moved outward to the end of its movement the teeth of the segment 13 are exposed beyond the periphery of the segmental plate, and can then engage the teeth of the pawl to lock the bolt against inward movement; but when the spindle is turned to carry the bolt inward the segmental plate projects beyond the teeth of the segment 13 sufficiently to hold the spring actuated pawl out of engagement with the segment, in order that the gear

wheel may turn freely. When the gear wheel moves outward the beveled portions of the opposed teeth engage and readily pass one another.

- 5 The outer end of the spindle is squared in order that the holder may be readily operated by a key.

It will be seen that the sash holder is simple and comparatively inexpensive in construction, that it is positive and reliable in
10 operation, and that it is capable of securely holding a sash at any desired adjustment.

Changes in the form, proportion and the minor details of construction may be resorted
15 to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

- 20 1. In a sash holder, the combination of a casing provided with flanges forming guides, a sliding bolt mounted in the casing and having a flange and a groove to fit said flanges, and provided with an outward extending arm offset from the body of the bolt, said bolt be-

ing provided with a rack, a cam pivoted to
25 the outer end of said arm and adapted to engage a sash, and a gear wheel meshing with the rack of the bolt for actuating the latter, substantially as described.

2. In a sash holder, the combination of a
30 casing, a sliding bolt mounted therein and provided with a rack, a gear wheel meshing with the rack and provided with a toothed segment, a pawl arranged to engage the teeth of the segment, and a plate carried by the
35 gear wheel, but having a limited movement independent thereof, and being of such a size and shape as to project beyond the teeth of the segment and engage the pawl, substantially as and for the purpose described. 40

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

JOSIAH WELDON.

Witnesses:

H. W. NIEMAN,
J. G. STEINKAMP.