J. W. EVANS.
SASH HOLDER.

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SASH-HOLDER.

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To all whom it may concern:

Be it known that I, Joseph W. Evans, of Newburyport, in the county of Essex and State of Massachusetts, have invented certain 5 new and useful Improvements in Sash-Holders, of which the following, taken in connection with the accompanying drawings, is a

specification.

The object of this invention is to provide an ro improved window sash holder and anti-rattler, especially adapted to meet the requirements of railway cars, street cars and the like. Heretofore it has been customary to employ springs pressing a friction plate or piece directly out-15 ward against the casing, and the tension of the spring was liable to be either excessive or insufficient, so that the sash would bind or

else would be unsupported.

My device consists of a base or body sunken 20 in an edgewise recess of the sash and fixed in such position, and a friction piece or lock anchored to the base but having a slight horizontal movement toward and from the base so as to engage with the sashway of the cas-25 ing or be released therefrom, in combination with a spring-actuated dovetailed wedge working vertically between said base and friction-piece and engaging with dovetailed inclined faces formed thereon, such wedge be-30 ing retracted against the resistance of the spring by a lever forming the finger-piece of the sash lifter. The action of the spring presses the wedge upwardly between the base and friction-piece, and the sidewise move-35 ment incident to the use of a sash loose enough to slide freely in its casing is prevented by the wedge and does not act directly on the spring; but when the operator seizes the lifter to raise or lower the sash he thereby re-40 tracts the wedge and the friction piece moves inwardly, away from contact with its casing.

In the drawings, Figure 1 represents a sash provided with my improvement, parts being broken away to show the construction. Fig. 45 2 is an elevation and Fig. 3 a vertical central section of my device on an enlarged scale, and Fig. 4 is a transverse section on the line x Fig. 3.

A is the sashway of the window casing and

50 B the sash moving therein.

C is the base or body of my device secured in an edgewise recess of the sash, and D is

the friction piece or lock which bears outwardly against the sash-way. These parts C and D have inclined faces approaching each 55 other and formed with dovetailed grooves, E, and between them is a wedge F, having corresponding dovetailed ribs on its inclined faces engaging with the grooves E. The wedge has a stem G, working through a ledge 60 or arm H, which projects from the base C, and the operating spring J, surrounds said stem and its ends bear against the wedge and said ledge or arm, with the requisite tension. The arm H, forms a guide for the stem G. The 65 lower end of the stem is connected by a link K to the lever L, which is fulcrumed within the casting M, and the free end of the lever is broadened to form a finger piece which when pressed upwardly upon, in raising the win- 70 dow, withdraws the wedge and releases the friction plate, giving free movement. The friction piece D, is suitably anchored to the base C, so as to move vertically with it but have a limited lateral movement toward and 75 from it. As herein shown the piece D has a horizontal arm N working in a perforation in the thickened upper part of the base, above its inclined face, the arm being held fast by a screw.

In Fig. 2 the spring is expanded and the wedge thrust upwardly to its limit, the friction piece being thus pressed outwardly against the casing A, while in Fig. 3 the wedge is drawn downwardly, compressing the spring 85 and freeing the piece D from contact with the casing. These two positions of the parts are respectively shown on the right and left sides of Fig. 1.

The casing may have one or more shallow 90 sockets to form locking points for the sash and from which the jar of a car-movement would not dislodge the friction piece D. Such a socket is shown near the lower right corner of Fig. 1, and is desirable; but for many pur- 95 poses a roughened bearing surface on the pieces D, will suffice to hold the sash at the desired height.

In raising or lowering the sash the operator will naturally press the finger-piece of the 100 lever L toward the rigid thumb-piece on the casting M, and this serves to release the friction and free the sash.

I claim as my invention—

1. In a sash-holder the base or body C and the laterally movable friction piece D anchored thereto, having the oppositely inclined faces, in combination with a spring-actuated wedge working between said faces and with a lever forming part of the sash lifter suitably connected with and adapted to retract such wedge against the resistance of its spring, substantially as set forth.

2. In a sash-holder, the base or body C, adapted to be secured in the edge of the sash and the laterally movable friction-piece D adapted to bear against the sashway of the casing, said parts having the upwardly-converging dovetailed faces as described, in com-

bination with the dovetailed wedge F engaging with said parts, the spring J serving to press it between them, and with the arm H, stem G and lever L to support and compress said spring and thereby actuate the friction 20 piece, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 5th day of

September, A. D. 1893.

JOSEPH W. EVANS.

Witnesses:
A. H. Spencer,
Thomas J. Kenny.