

UNITED STATES PATENT OFFICE.

WILLIAM F. EVANS, OF ASTORIA, NEW YORK.

WINDOW-SASH HOLDER AND ALARM.

SPECIFICATION forming part of Letters Patent No. 791,614, dated June 6, 1905.

Application filed August 31, 1904. Serial No. 222,800.

To all whom it may concern:

Be it known that I, WILLIAM F. EVANS, a citizen of the United States, residing at Astoria, in the county of Queens and State of New York, have invented certain new and useful Improvements in Window-Sash Holders and Alarms, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to window-sashes; and the object thereof is to provide a device which will operate to hold the sash at any desired point of adjustment and which will also produce an alarm if an attempt be made to raise or open a sash provided with my improvement.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a front view of a window-frame and showing two sashes mounted thereon, one of which, the bottom sash, is provided with my improvement; and Fig. 2, a similar view, on an enlarged scale, part of the construction in each view being shown in section.

In the drawings forming part of this specification I have shown at *a* an ordinary window-frame provided with the usual upper sash *b* and lower sash *c*, and in said drawings I have shown my improvement applied and operating in connection with the lower sash *c*.

In the practice of my invention I form in the side of the frame, adjacent to the sash, a chamber *a*² and secure therein a metal casing *d*, having a face-plate *d*², which is secured to the frame in any desired manner, and mounted in the casing *d* is a ratchet-wheel *e*, the shaft or axle *e*² of which is mounted in and movable in slots *d*³, formed in the sides of the casing *a* and one of which is shown in full lines in Fig. 1 and the other in dotted lines in Fig. 2, and as thus mounted the wheel *e* is free to move toward and from the sash.

In the back part of the casing *a* is placed a plate-spring *f*, one end of which is secured to a pin *f*² and the other end of which rests on an-

other pin, *f*³, and secured to one of said pins, the pin *f*² as shown in the drawings, is a yoke-spring *g*, the cross-head *g*² of which bears on the wheel *e* and on the central portion of the spring *f*. It will be understood, of course, that the casing *d* is not absolutely essential, and the plate-spring *f*² and yoke-shaped spring *g* may be mounted in the chamber *d*, if desired, as may also the wheel *e*.

The spring *f* forces the wheel *e* in the direction of the sash *c*, and said wheel bears firmly on said sash or the said sash bears firmly on said wheel, and in practice when the sash is in position the wheel *e* is forced backwardly almost entirely within the casing *d* or within the chamber *a*². When the parts are in this position, the sash will be securely held against rattling or any movement except when moved by force, and any attempt to raise the sash will turn the wheel *e* in the direction of the arrow *x*, and the cross-head *g*² of the yoke-shaped spring *g* in passing over the teeth of the wheel *e* will cause a rattling sound or alarm which may be distinctly heard, and the sash may be lowered at any time without causing this sound or alarm and without turning the wheel *e*.

It will be understood that if this device is applied to the upper sash the parts will be so arranged that the lowering of said sash will turn the wheel *e* and cause the rattling sound or alarm above referred to.

The plate-spring *f* may be secured in position in any desired manner, the only object in this connection being that said spring will operate to force the wheel *e* in the direction of the sash and will yield slightly to permit of the movement of said wheel toward and from the sash.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A window frame and sash, one of said parts being provided with a chamber which opens outwardly, a ratchet-wheel mounted in said chamber and movable toward and from the other part, a plate-spring secured in said chamber back of said ratchet-wheel and adapted to force said wheel outwardly, and a yoke-shaped spring mounted in said

frame and the cross-head of which fits between said plate-spring and said wheel and bears on said wheel, substantially as shown and described.

- 5 2. In a device of the class described, a casing adapted to be secured in a window frame or sash to form a chamber therein which opens outwardly, said casing being provided with parallel sides and a back and the sides
10 thereof being provided with slots which range forwardly and backwardly, a ratchet-wheel mounted in said casing and the shaft of which is movable in said slots, a spring placed in said casing back of said wheel and

adapted to force said wheel outwardly, and 15 a yoke-shaped device secured in said casing between said spring and said wheel and the cross-head portion of which bears on said wheel between said spring and said wheel, substantially as shown and described. 20

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 30th day of August, 1904.

WILLIAM F. EVANS.

Witnesses:

C. J. KLEIN,
F. A. STEWART.