

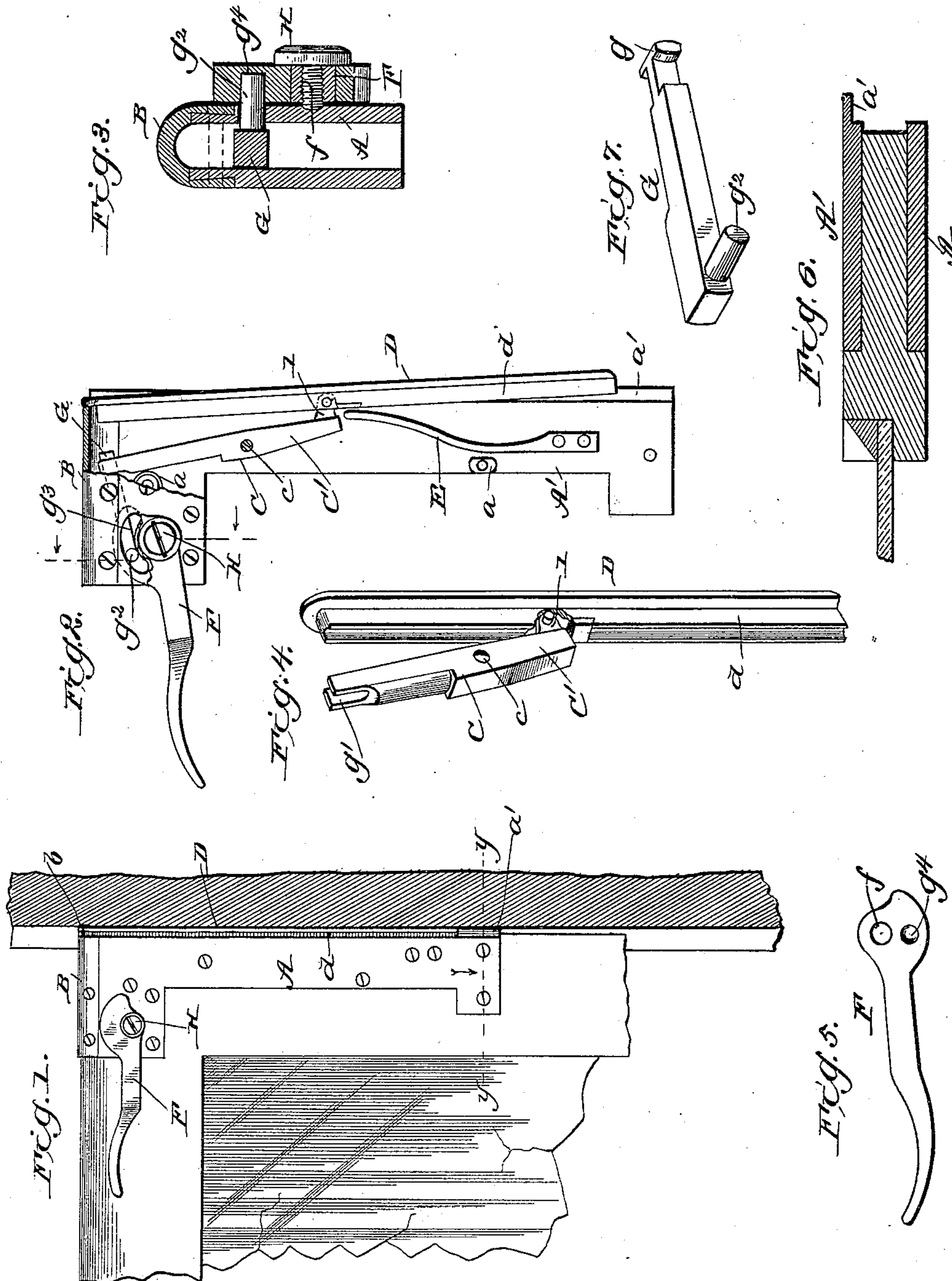
(No Model.)

H. A. FLATMAN & J. SEED.

SASH HOLDER.

No. 398,039.

Patented Feb. 19, 1889.



WITNESSES:  
Fred G. Dietrich  
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# UNITED STATES PATENT OFFICE.

HENRY ABEL FLATMAN AND JAMES SEED, OF SOUTHBROOK, NEW ZEALAND.

## SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 398,039, dated February 19, 1889.

Application filed June 29, 1888. Serial No. 278,588. (No model.) Patented in New Zealand October 22, 1887, No. 2,597.

*To all whom it may concern:*

Be it known that we, HENRY ABEL FLATMAN and JAMES SEED, of Southbrook, Canterbury, New Zealand, have invented a new and useful Improvement in Window-Clamps or Sash-Holders, (for which we have obtained a patent in New Zealand, No. 2,597, bearing date October 22, 1887,) of which the following is a specification.

10 This invention is an improved sash holder or clamp intended to enable the suspension and prevent the rattling of window and blind sash, especially those used in railway-cars.

15 The invention consists in the novel construction and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a face view of the invention in connection with part of a sash and frame. Fig. 2 is a detail face view 20 of the invention, the side plate being partially broken away. Fig. 3 is a detail section on the line indicated by dotted line in Fig. 2. Fig. 4 is a detail view of the friction-piece and the lever which supports the same. Fig. 5 is a detail view of the handle-lever. Fig. 6 is a sectional view on about line *y y*, Fig. 1; and Fig. 7 is a detail view of the pitman or connecting rod.

25 The casing is formed of side plates, *A A'*, and top or crown plate, *B*, posts or bosses *a* being provided on the inner faces of one (usually *A'*) of the plates *A A'* to hold such parts properly apart, and the casing is suitably secured, in practice, to the sash, or sliding blind, 35 it may be, in the manner shown in the drawings. The top or crown plate is fitted at its edges on the upper edges of the side plates, the latter having preferably dovetail rabbets to receive the correspondingly-formed edges 40 of the crown-piece, such crown-plate operating to prevent ingress of dust and the like to the interior of the casing. By preference the outer plate, *A'*, extends at its outer edge beyond that of the inner plate, *A*, and the said extension *a'*, entering a groove in the window-frame, forms a guard to prevent the entrance of rain, dust, and the like into the holder. The crown-piece *B* has at one side an extension, *b*, corresponding to the extension *a'* of 45 the plate *A'*.

50 Within the casing we pivot, at *c*, a lever, *C*,

the lower arm, *C'*, of which connects with and supports a friction-piece, *D*, which in the construction shown is a plate extending from the upper end of the casing nearly to the lower 55 end thereof, and is formed with a narrow rib, *d*, on its inner face, which rib fits and operates between the plates *A A'*. At a point below its connection with lever *C* the friction-piece *D* is engaged by a spring, *E*, which operates 60 to force such piece *D* out at its lower end and to cause its upper end to bear against the casing, so that such friction-piece, being practically fulcrumed at its upper end, is pressed normally out at its lower end by the 65 action of the spring *E*. In the construction shown the spring is a plate of metal secured at one end to the casing and bearing at its opposite end against the friction-piece.

It will be seen that the friction-piece will 70 normally project in such manner as to engage the window-frame, and thus hold the sash or blind by frictional contact in the position to which it may be set. It will also be seen that by drawing in the lower arm of the lever *C* 75 the friction-piece will be adjusted clear of the window-frame, so that the sash may be set higher or lower, as desired. Manifestly the lever *C*, which forms or constitutes a retractor for the friction-piece, might be arranged to 80 be engaged directly by the hand of the operator; but, by preference, we provide a lever, *F*, which, in order to distinguish it from lever *C*, may be called the "handle-lever," while the said lever *C* may be called the "support- 85 ing-lever."

In referring to the lever *C* as constituting the retractor, and while we prefer to so construct the retractor, it will be understood that we do not desire to limit ourselves in some of 90 the broad features of our invention to the particular construction of the retractor as shown.

The levers *C F* are connected by a pitman-rod, *G*, formed at one end with a bead, *g*, and fitted at said end in a notch, *g'*, in the upper 95 end of the lever *C*, and provided at its opposite end with a stud, *g<sup>2</sup>*, which projects laterally through a curved slot, *g<sup>3</sup>*, in the plate *A* and into the socket *g<sup>4</sup>* of the handle-lever *F*, which is pivoted at *f* on a boss formed on the plate 100 *A*, and is secured on said boss by the head of a screw, *H*, as shown. Manifestly this lever



might be pivoted in any other suitable manner, and may, if desired, be arranged in the middle of the top rail of the sash, or elsewhere, if desired, by varying the length of the connecting-rod G. By lifting the handle-arm of this lever F the upper arm of lever C will be forced forward toward the side of the sash, and the lower arm of said lever will be drawn in and thereby withdraw the piece D, so it will clear the window-frame, so the sash or blind may be moved up or down at will. When the handle-lever is released, the spring at once relaxes and forces the friction-piece out into contact with the window-frame and holds the sash in place. The connection of lever C with the friction-piece is preferably effected by providing the lower end of lever C with a short crank-like arm, I, which is pivoted to the friction-piece at a point between the ends thereof, preferably at about the center, as shown, so that the upper end of the piece will fulcrum against the casing when its lower end is actuated by the spring in one direction or the operating devices in the other.

As referred to above, the device is applicable to window-sash and sliding blind-sash; so we desire it understood that in referring to the sash in the appended claim clauses we do not intend to confine ourselves to the use of the invention on window-sash.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A sash-holder comprising the casing or support, the friction-piece, the lever pivoted to the casing and supporting the friction-piece on one of its ends, and the spring engaging the friction-piece, substantially as set forth.

2. The combination, in a sash-holder, with the casing and a lever pivoted thereto, of the friction-piece pivotally suspended at a point midway between its ends on the said lever,

whereby said piece may fulcrum at one end against the casing, and the spring engaging said friction-piece, substantially as set forth.

3. The combination, with the casing, of the friction-piece arranged to fulcrum at one end against said casing, a spring whereby to force the opposite end of said piece outward, and a retractor connected with said friction-piece between its ends, whereby it may be drawn in opposition to the action of its spring, substantially as set forth.

4. In a sash-holder, the combination of the casing having side plates, the friction-piece having on its inner side a narrow rib fitting between the said side plates, a spring engaging said friction-piece, and a retractor connected therewith, substantially as set forth.

5. A sash-holder comprising the casing formed with inner and outer side plates, and having the outer edge of the outer plate extended, forming a guard, and having the top or crown plate fitted on said side plates, the friction-piece, the spring engaging the same, and the retractor, substantially as set forth.

6. The combination, in a sash-holder, of the casing, the friction-piece, the spring engaging said piece, the lever C, connected at its lower end with the friction-piece, the handle-lever, and the rod connecting said handle-lever with the lever C, all substantially as and for the purposes specified.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 28th day of December, A. D. 1887.

HENRY ABEL FLATMAN.  
JAMES SEED.

Witnesses:

A. J. PARK,  
J. K. SHARP,  
*Clerks to Harper & Co., Solicitors, Christchurch, N. Z.*