

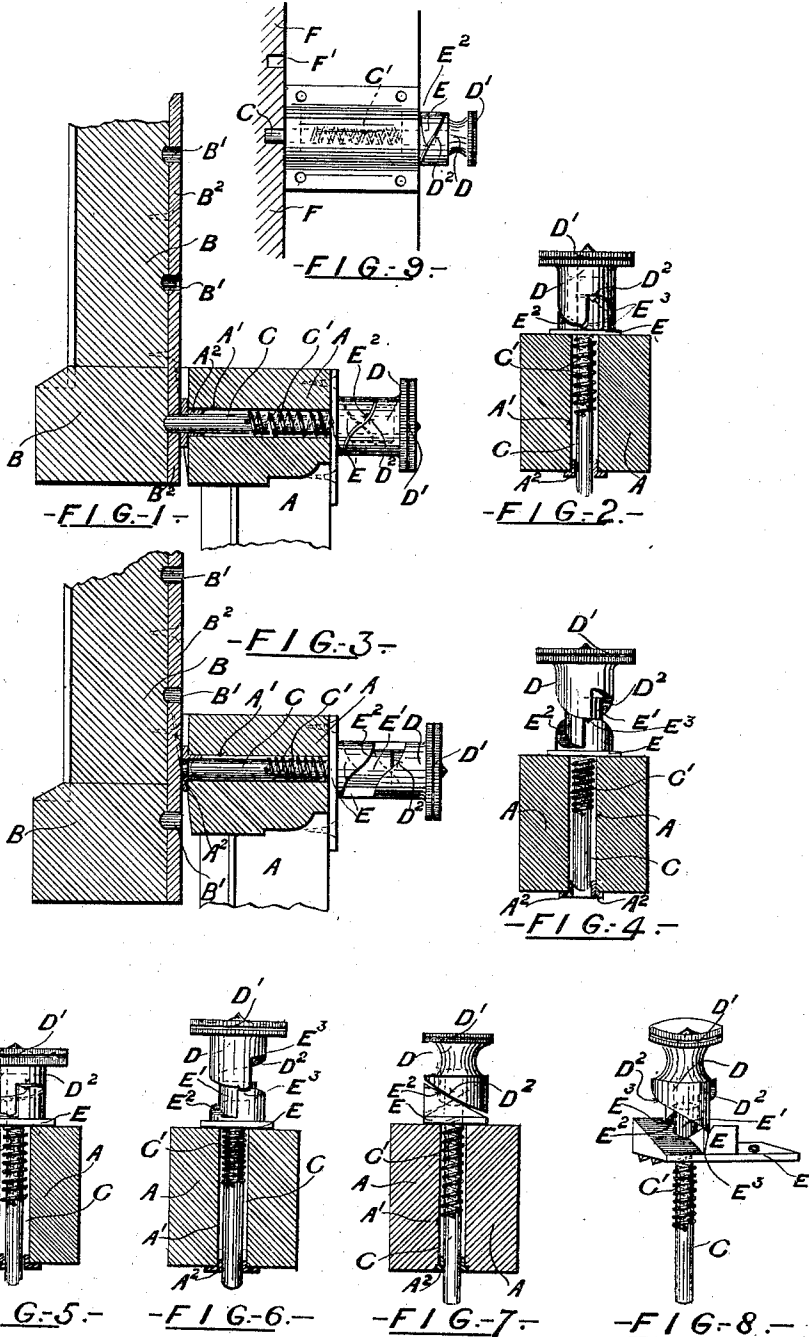
No. 701,238.

Patented May 27, 1902.

R. WILLIAMS.  
SASH FASTENER.

(Application filed Feb. 28, 1902.)

(No Model.)



Witnesses;  
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# UNITED STATES PATENT OFFICE.

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## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 701,238, dated May 27, 1902.

Application filed February 28, 1902. Serial No. 96,146. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT WILLIAMS, mining agent, a subject of the King of Great Britain, residing at Fisher street, Malvern, in the State of South Australia, in the Commonwealth of Australia, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

My invention relates to certain improvements in sash-fasteners, and refers more particularly to fasteners for windows in which the sashes slide up and down within a frame, as commonly used in houses, railway-carriages, and the like.

The object of my invention is to provide a device of neat and inexpensive construction by which sashes may be fastened and securely locked in any convenient position, either closed or partially open. I accomplish this object by providing a sash-fastener which consists, essentially, of a spring-pin attached to the sash and engaging slots or recesses, such pin being operated by means of a knob or head working on spiral-shaped or inclined surfaces, whereby it is moved in and out of engagement.

In applying my invention the device is preferably attached to the lower sash and so adapted that the spring-pin engages slots or recesses in the upper sash, and in this way the two sashes are locked together in any convenient position, or, furthermore, my invention may be so adapted as to engage slots or recesses in the frame whereby the sash is held in any position.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a side sectional elevation of a portion of two sashes locked together, showing the application of my invention. Fig. 2 is a cross-section of the same, showing the fastener and one sash only. Fig. 3 is a similar side sectional elevation, showing the spring-pin withdrawn out of engagement for the purpose of moving the sashes, while Fig. 4 is a cross-

section of the same similar to Fig. 2. Figs. 5 and 6 are cross-sections showing a modification in the actuating knob or head. Fig. 7 is a cross-section of another modification, while Fig. 8 is a perspective view of the same. Fig. 9 is a side view of my invention as adapted for the purpose of locking the window-sash to the window-frame, to be used more particularly for railway-carriages.

A is the sash to which my invention is applied, and where two sashes are provided this is preferably the lower sash, as shown in Figs. 1 and 3. This sash A is adapted to slide up and down within a framework and moves past an upper sash B, which is also adapted to move within the framework in the ordinary way. The sash A is provided with a hole or recess A', within which works a spring-pin C, having a spring C', the tension of which forces it into position. This spring-pin C works in a suitable bearing-plate A<sup>2</sup> at the end of the hole or recess A' and is adapted to engage slots or recesses B' in the upper sash B. Upon the sash B may be fastened a plate B<sup>2</sup>, within which are provided the slots or recesses B', at preferably equal distances apart. If necessary, the plate B<sup>2</sup> may be provided with guiding edges, which engage the bearing-plate A<sup>2</sup>, whereby it may be always insured that the spring-pin C will engage the slots or recesses B'.

The spring-pin C is provided at its outer end with a knob or head D. This knob or head D is so adapted that on being turned it is adapted to move outward, thereby compressing the spring C' and moving the pin C out of engagement from the slots or recesses B'. For this purpose the knob or head D is provided at its outer end with a milled edge D' or thumb-nut, whereby it may be operated by the fingers. The knob or head D is preferably cylindrical, fitting over and working upon a projecting stud E', arranged upon a plate E, attached to the sash A. This stud E' is provided with a central recess through which the pin C passes. The lower edge D<sup>2</sup> of the cylindrically-shaped knob or head D is made spiral-shaped or inclined, as shown in

the drawings, and engages corresponding spiral-shaped edges  $E^2$ , arranged around the stud  $E'$ . Thus as the knob or head  $D$  is turned the spiral-shaped edges  $D^2$  and  $E^2$  cause it to move outward, carrying with it the pin  $C$  out of engagement with the recesses  $B'$ . In Figs. 1, 2, 3, and 4 the knob or head  $D$  is shown as having two spiral-shaped edges  $D^2$ , the plate  $E$  being provided with a corresponding number, each edge being half a turn or half the circumference of the diameter of the knob or head  $D$ . In Figs. 5 and 6 the knob or head  $D$  is shown with only one spiral-shaped edge  $D^2$  being of one complete turn and the edge  $E^2$  on the plate  $E$  being of corresponding shape. In Figs. 7 and 8 the knob or head  $D$  is shown with two inclined surfaces  $D^2$ , engaging wedge-shaped blocks  $E^2$  on the plate  $E$ .

For the purpose of holding the spring-pin  $C$  in place out of engagement with the slots or recesses  $B'$  in the sash  $B$  the spiral-shaped edges or blocks  $E'$  are provided at their uppermost points with small notches or recesses  $E^3$ . As the knob or head  $D$  rises the points formed by the tapering edges of the spiral-shaped edges or inclined surfaces  $D^2$  at the bottom engage these notches or recesses  $E^3$  when the knob or head  $D$  has reached its highermost point, or the lowermost point of the spiral-shaped edges or inclined surfaces  $D^2$  may be so shaped as to engage the notches or recesses  $E^3$ . The knob or head  $D$  is thus held in place with the spring-pin  $C$  out of engagement. By then turning the knob or head  $D$  the spring-pin  $C$  is released and the tension of the spring  $C'$  causes it to again engage the slots or recesses  $B'$  in the sash  $B$ .

In Figs. 1 and 3 my invention is shown as applied for the purpose of fastening one window-sash  $A$  to the other  $B$ , whereby they are securely locked together in any particular position, and in this way the windows may be

securely and safely locked and yet be partially open to provide the necessary ventilation. In applying my invention in this manner a sash-fastener is preferably provided on each side of the sash; but it will be well understood that it is equally applicable to the center of the sashes as with sash-fasteners as at present in use.

In Fig. 9 is shown a modification whereby my invention is equally applicable for the purpose of locking the sash to the side frame. In this case the spring-pin is affixed to the side of the window-sash and operated by the knob or head  $D$ , as before described, engages slots or recesses  $F'$  within the window-frame  $F$ . This modification is particularly adaptable to the windows of railway-carriages and the like, and the sash may be thus fastened in any convenient position.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In a sash-fastener, a sash, a plate secured thereto having a bored stud projecting therefrom and provided with inclined surfaces, a knob rotatably and slidably mounted on said stud and carrying a spring-controlled pin passing through the bore of said stud, said knob having inclined surfaces, adapted to engage and work on those of the stud, and said inclined surfaces being respectively provided at their highest and lowest points with engaging means for holding the pin in a retracted position against the resistance of its spring.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT WILLIAMS.

Witnesses:

EDWIN B. COLTON,  
CHARLES S. BURGESS.