(No Model.)

H. P. TYLER & J. B. ATWOOD.

SASH FASTENER.

No. 253,563. Patented Feb. 14, 1882.

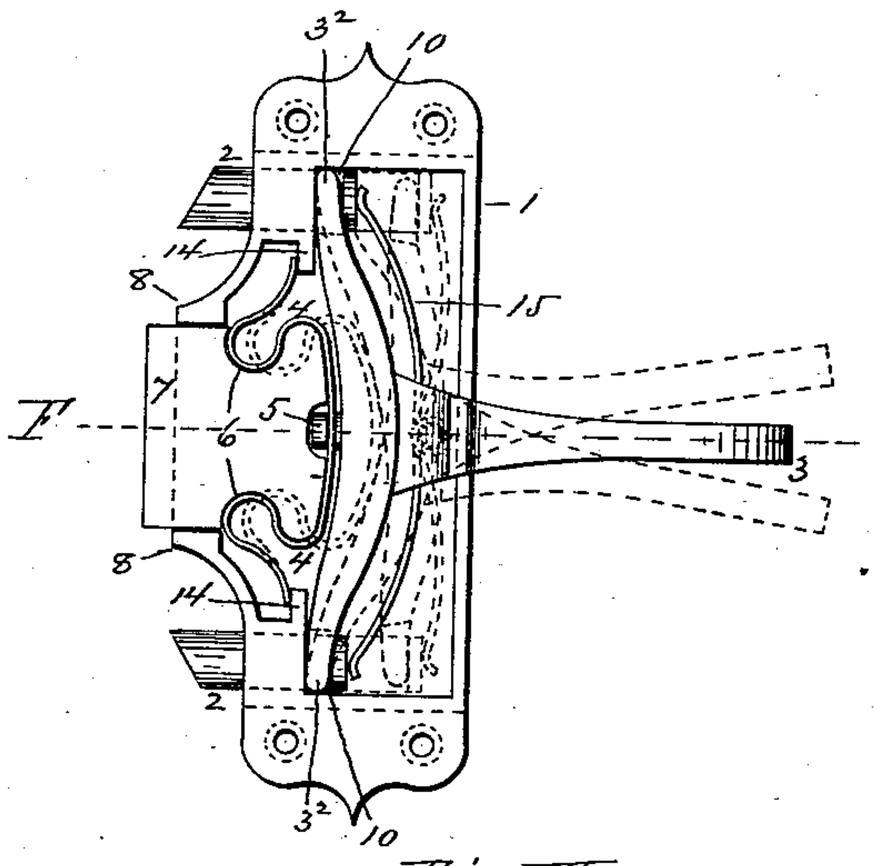

Fig. III

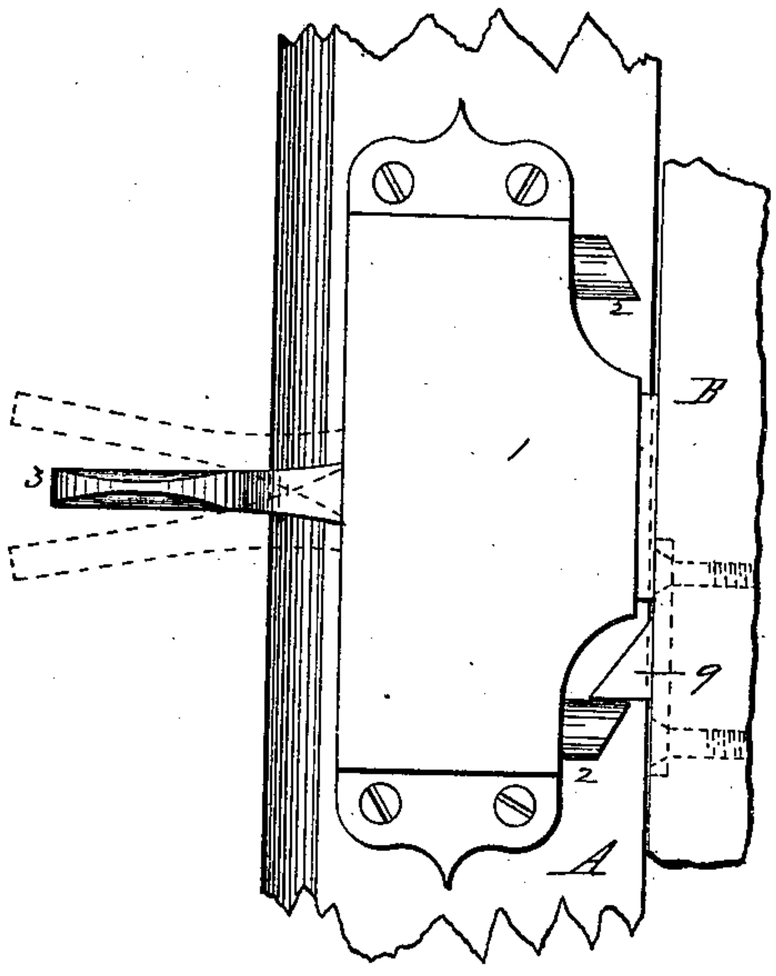

Fig. I

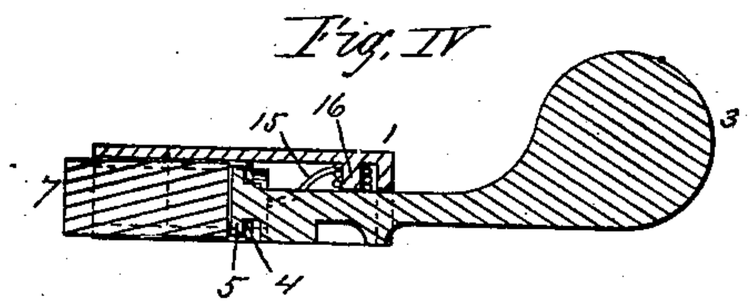

Fig. IV

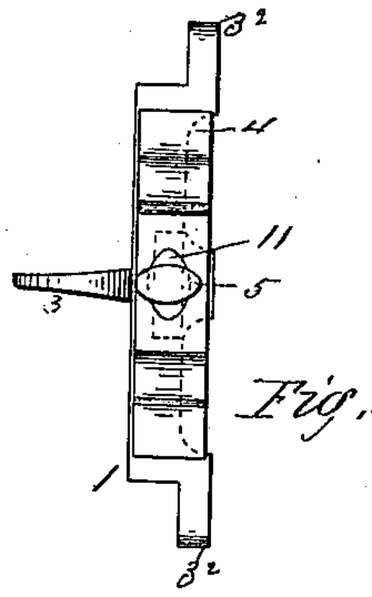

Fig. II

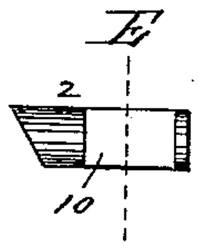

Fig. V

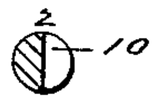

Fig. VI

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UNITED STATES PATENT OFFICE.

HENRY P. TYLER, OF NORTH BROOKFIELD, AND JAMES B. ATWOOD, OF THREE RIVERS, ASSIGNORS OF ONE-HALF TO M. D. SLEEPER, OF SPRINGFIELD, MASSACHUSETTS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 253,563, dated February 14, 1882.

Application filed July 1, 1881. (No model.)

To all whom it may concern:

Be it known that we, HENRY P. TYLER, of North Brookfield, in the county of Worcester, and JAMES B. ATWOOD, of Three Rivers, in the county of Hampden, both in the State of Massachusetts, have invented a new and useful Improved Sash-Holder, of which the following is a specification and description.

The object of my invention is to hold a sash securely in any position in which it may be placed, whether raised more or less or entirely down against the window-sill; and we accomplish this by the mechanism substantially as hereinafter described, and illustrated in the accompanying drawings, in which—

Figure I is a side view of our invention as secured to a railway-car-window sash. Fig. II is a front view of the operating-lever with the actuating-spring attached and the rubber friction-pad removed. Fig. III is an inside view of the holder, showing its several parts. Fig. IV is a transverse section at line F. Fig. V is a side view of one of the bolts, and Fig. VI is a transverse section at line E.

In the drawings, A represents the side rail of a window-sash, and B denotes a portion of one side of the window-frame. 1 denotes the case of the holder, which upon the front side extends forward to form the jaws, as 8, this case being preferably cast of composition or brass, or other suitable metal. A lever, as 3, having two arms, as 3^2, projects through the rear part of the case, the extreme end of each of these arms engaging against a bearing in the frame 1.

A small stud projects from the front end of the lever 3, midway between the arms 3^2, with an elongated or oval button on its end extending in a horizontal direction, and a spring, as 4, portions of which near each end are bent inward toward each other, as shown at 6 in Fig. I, is provided with an elongated hole, as 11, through which the button 5, held in a position coincident with the hole 11, is inserted, after which the spring 4 and arms 3^2 of the lever 3 are placed parallel, and the button 5 then extends in a direction at right angles to the hole 11, and the spring is then held upon the stud by the button.

A friction-pad, as 7, of rubber or of other material of suitable character, (but we prefer rubber,) is made on one side approximately of a form corresponding to that of the spring, and is placed in the spring and between the jaws 8, so as to be embraced by the inwardly-projecting portions 6 of the spring, and with the ends of the spring bearing against the lugs 14 of the case, as shown clearly in Fig. III.

A bolt, as 2, is arranged to slide horizontally in each end of the case, said bolt being halved out or a recess made therein, as at 10, with which recess the end of the arm 3^2 engages, said recess being of sufficient length that the bolt may slide to and fro independently of the movement of the arm 3^2 of the lever or thumb-piece 3; and a spring, as 15, in the case, and preferably secured by coiling it around a stud, as 16, cast in the case, holds the bolts outward by the pressure of its ends against the bolts, as shown clearly in Fig. III.

A stud, as 9, preferably beveled or curved on its upper side, is secured to the lower part of the window-frame or to the stop inside, as shown in Fig. I, and, if desired, a similar stud, though beveled or curved on its lower side, is secured to the inside of the window-frame or stop above. The sash-holder case 1 is then secured to the sash, so that the pad 7 will impinge firmly against the inside of the window-frame or stop; and the outer ends of the bolts 2 should be beveled, as shown in Fig. I, so that the lower one will ride over the stud 9 below when the sash is moved down, and the upper bolt will ride over the upper stud when the sash is moved up, if an upper stud is used. When the sash A is down in place the outer end of the lower bolt, 2, is beneath the stud 9, and cannot be raised without moving the lever 3; but if the lever 3 be raised, as shown in dotted lines in Fig. I, the bolt will be drawn back by the lower arm, 3^2, so that it can move up past the stud 9, and the pad 7 will also thereby be drawn back and away from contact with the stop or window-frame, and the sash may be easily raised so long as the lever is raised. When the lever 3 is released the pressure of the ends of the spring 4 against the lugs 14 in the case 1 and elasticity of said spring,

drawing forward upon the button 5, move the lever 3 back into its position shown in black lines and force the edge of the pad 7 firmly against the window-stop with sufficient friction to hold the sash in any position in which it may be left, and the sash will remain in such position without being jarred down. When it is desired to move the sash down the lever 3 is moved down into the position shown in the lower dotted lines, and the pad is also drawn back and away from the stop or window-frame, and the sash will move down freely.

Of course, as the pad holds the sash up in any desired position securely without the aid of the upper bolt, 2, and stud 9, if the holder is to be always used on the same side of the sash, only the lower bolt and stud will be necessary in order to lock the sash down; but by using a bolt at each end of the holder the latter is made reversible, and may be secured to either side of the sash, the upper bolt when secured to one side of the sash becoming the lower bolt when secured to the other side, to lock the sash down. When the sash is moved entirely down, as the bolt 2 passes the stud 9 the inclined end of the stud, as the inclined end of the bolt strikes it, forces the latter and the spring 15, pressing against the bolt, inward without moving the arm 3^2 of the lever, and as soon as the bolt has passed the stud 9 the pressure of the spring 15 against the bolt forces the latter outward and locks the sash down. Both bolts—one at each end of the holder—operate precisely alike, whichever end of the holder be uppermost.

This sash-holder is peculiarly adapted for use upon railway-window sashes, as the latter may be securely held at any desired height, and the rattling of the sash in the frame is prevented by the pad 7 holding the sash against the opposite side of the frame, although it may be used with any window-sash with equally good results, and the device is cheap, not liable to disarrangement of its parts, and is effective.

If it is desired to use the holder as a single operating lock or holder, the upper bolt, 2, may be made permanent or fixed, or be entirely removed, in which case the spring 4, by its elasticity and its bearing at each end, operates to hold the arms 3^2 forward against the case at each end, the bearing of the arm at the upper end of the frame serving as a pivot upon which the lever 3 is moved, in which case the lower bolt, 2, and the friction-pad 7 will be operated by the thumb-piece or lever 3, as before, whether moving up or down.

It is evident that instead of using the stud, as 9, secured to the window-frame or stop, a hole may be made in the frame or stop and the bolt be made of sufficient length to enter said hole to lock the sash down; but in practice we prefer to use the stud.

It is evident that the spring 4 may be secured to the lever 3 by a rivet or screw, instead of the button 5; but we prefer the latter, as less expensive in the matter of construction.

Having thus described our invention, what we claim as new is—

1. The combination, in a sash-holder, of a case, a lever provided with two oppositely-projecting arms, each having a bearing in said case, a spring secured to said lever between said arms, and with the ends of the spring against a bearing in the frame, with a friction-pad secured to said spring, whereby the friction-pad is operated by the movement of the lever in either of two directions, substantially as described.

2. The combination, in a sash-holder, of a case, a lever provided with two oppositely-projecting arms, each having a bearing in said frame, a spring secured to said lever between said arms, and with the ends of the spring against a bearing in the case, a friction-pad secured to said spring, with a sliding bolt adapted to engage with the end of either arm, and a spring secured in the case and bearing against the bolt, whereby the pad and bolt may be drawn away from engagement with the window-frame by the movement of the lever and the bolt thrown into engagement with the window-frame independent of the movement of the lever, substantially as described.

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