

E. R. MITCHELL.  
VEHICLE SASH FASTENER.  
APPLICATION FILED MAR. 11, 1909.

935,389.

Patented Sept. 28, 1909.

Fig. 1.

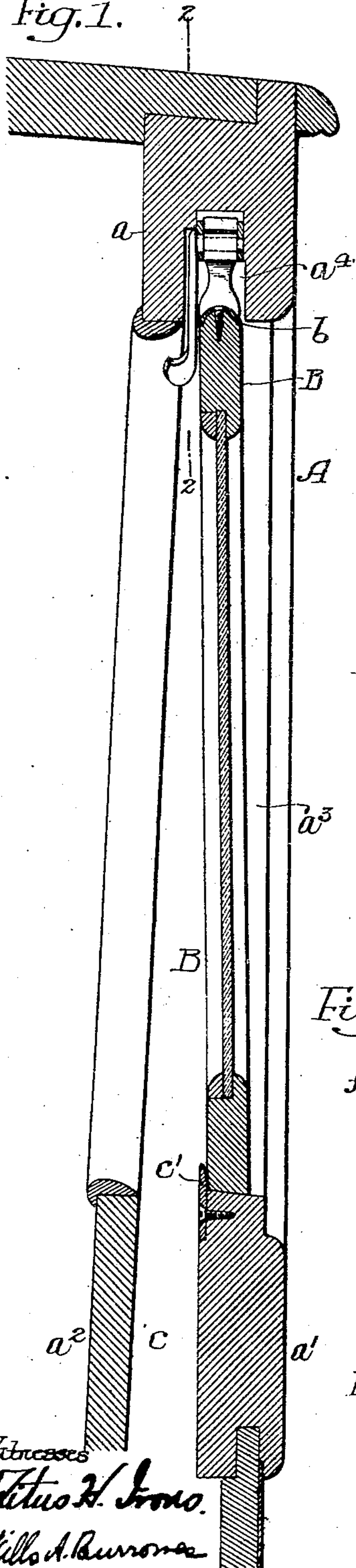


Fig. 2.

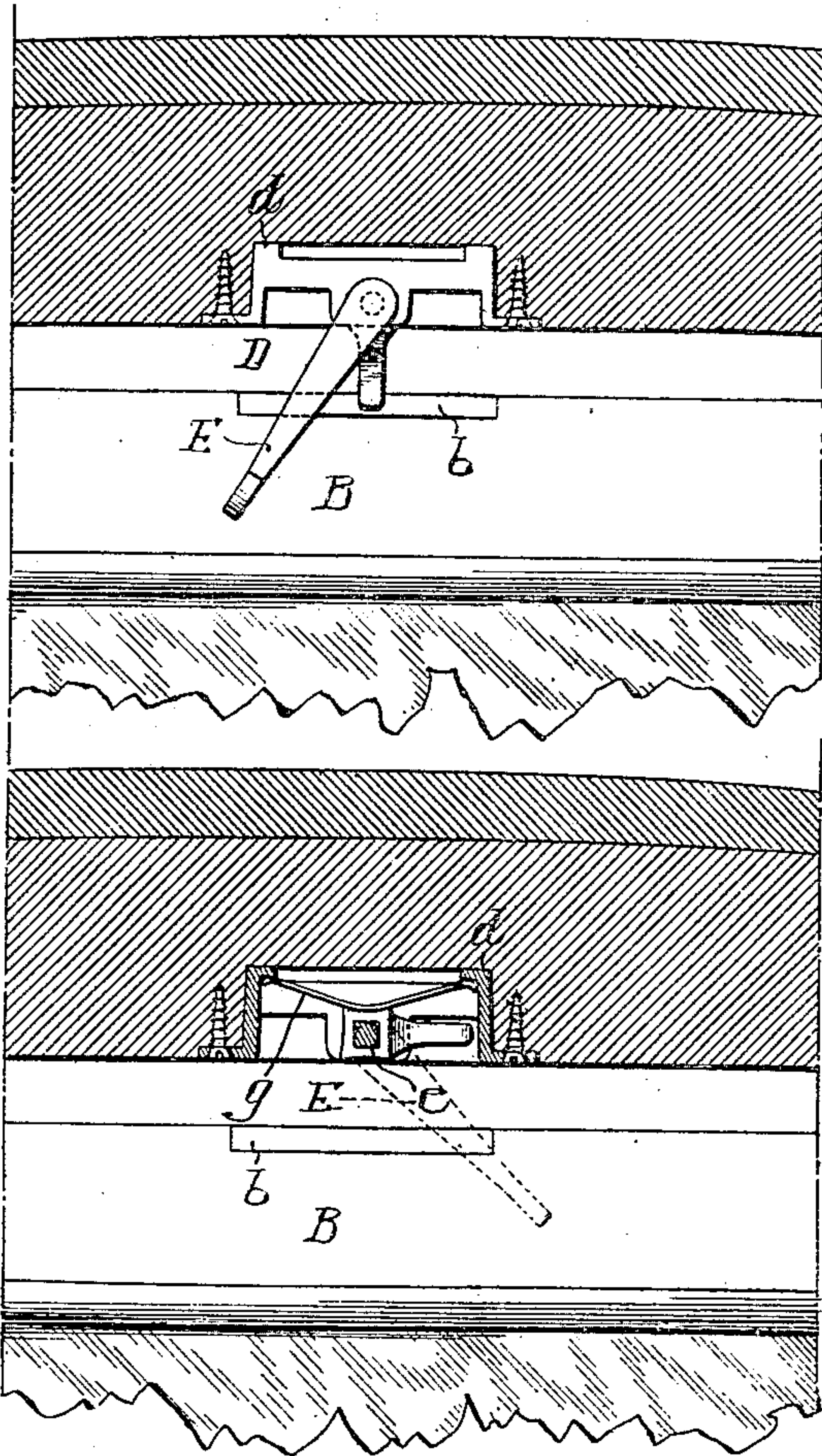


Fig. 3.

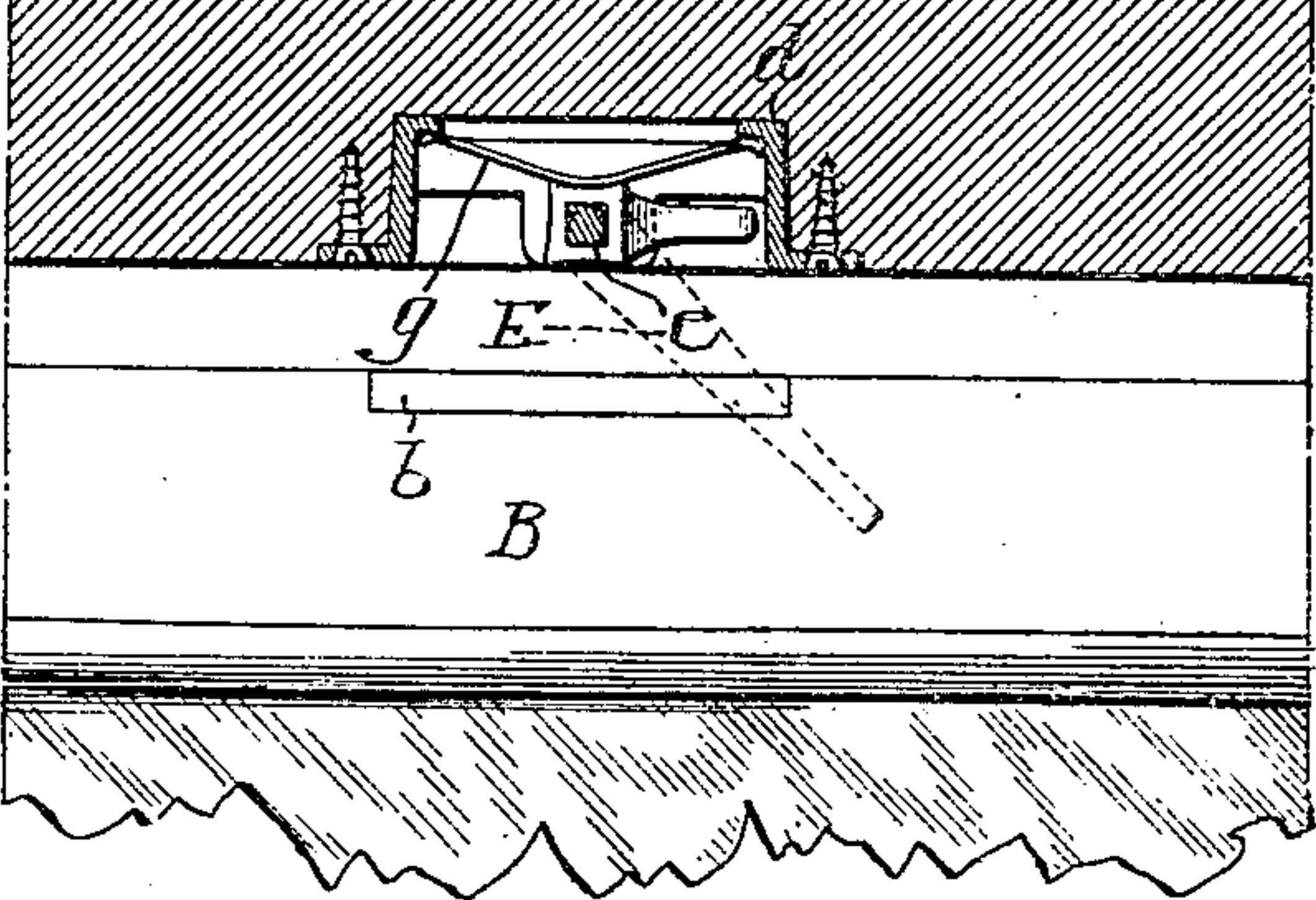


Fig. 5.

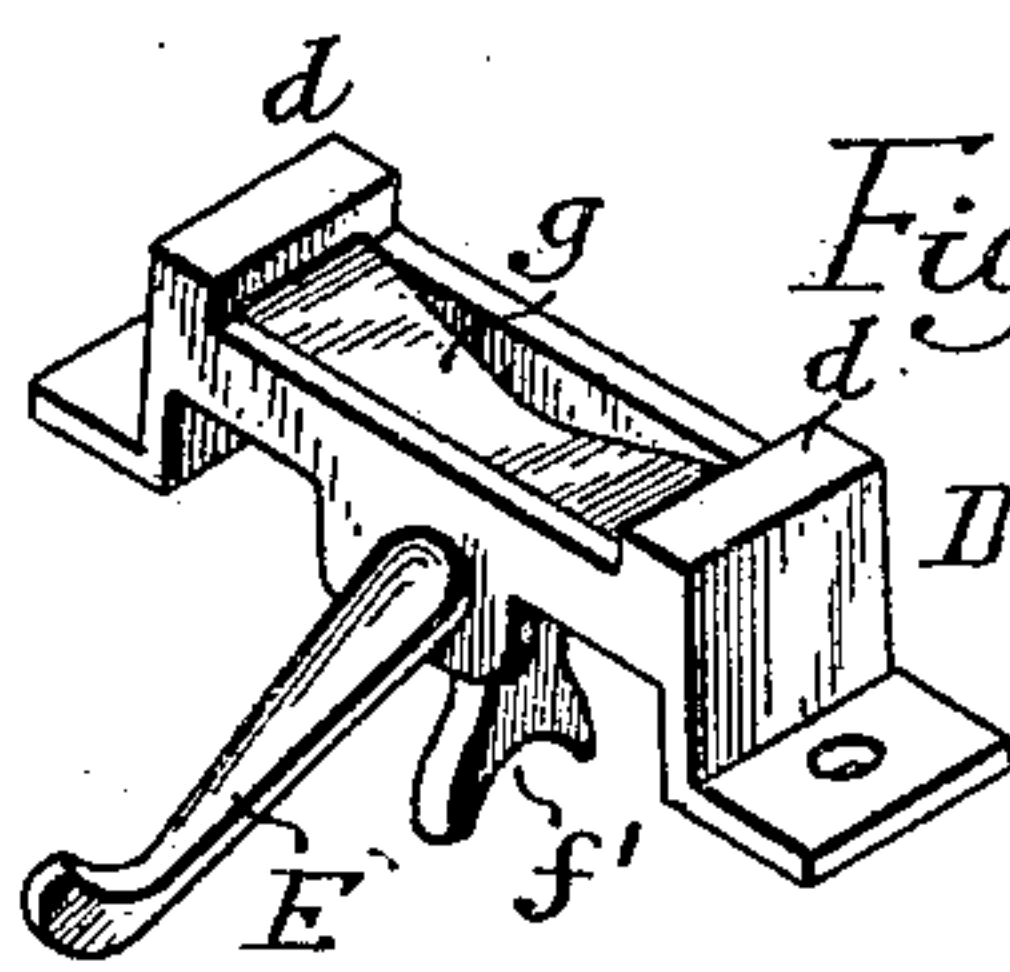
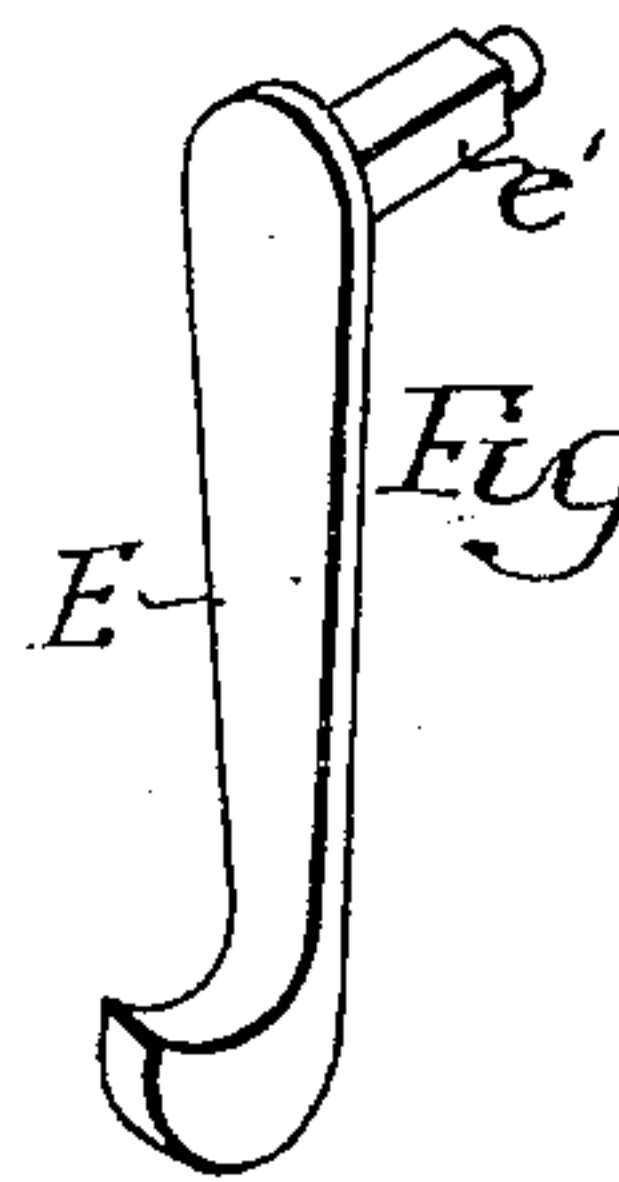
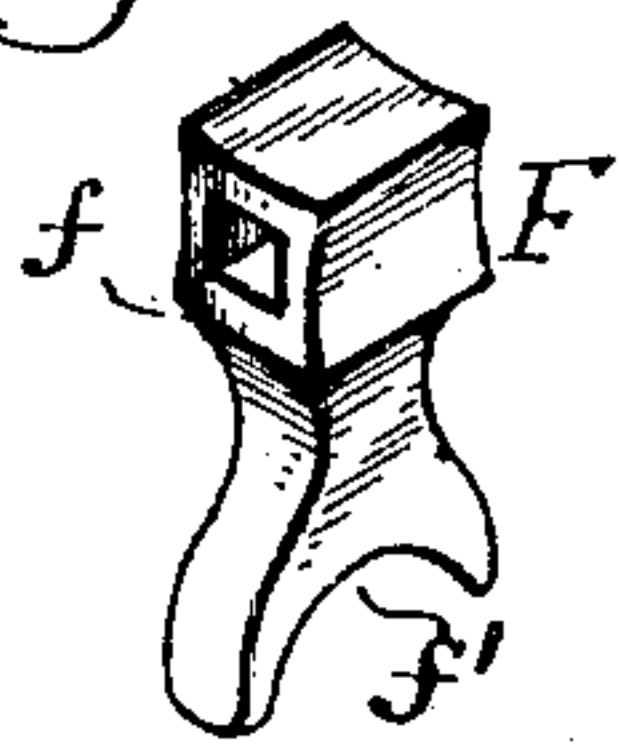


Fig. 4.

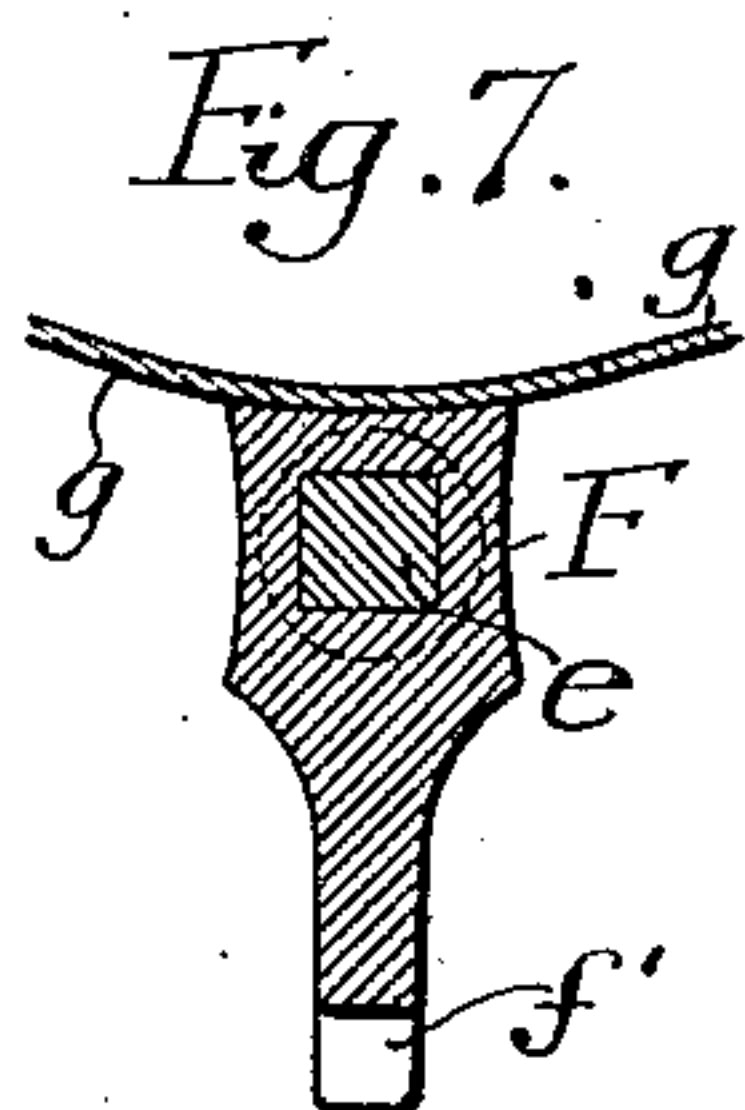


Fig. 7.

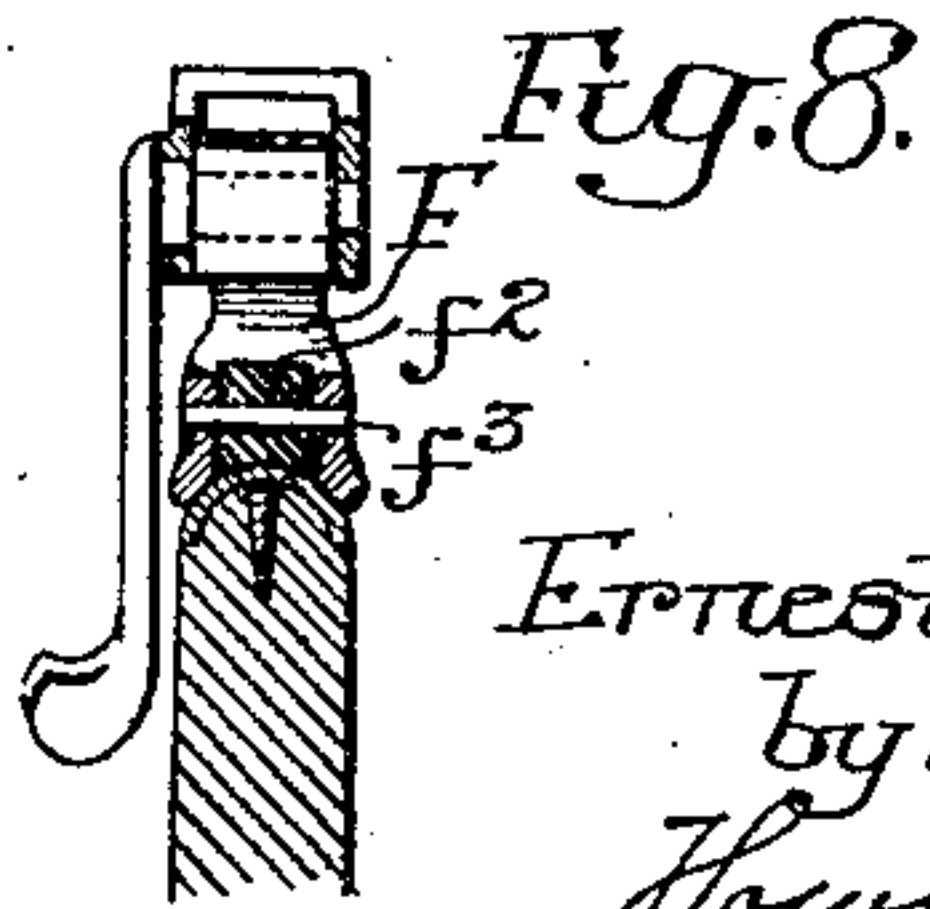


Fig. 8.

Witnesses  
Titus H. Irons.  
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Inventor:  
Ernest R. Mitchell.  
by his Attorneys.  
Howe & Knapp



# UNITED STATES PATENT OFFICE.

ERNEST R. MITCHELL, OF PHILADELPHIA, PENNSYLVANIA.

VEHICLE-SASH FASTENER.

935,389.

Specification of Letters Patent.

Patented Sept. 28, 1909.

Application filed March 11, 1909. Serial No. 482,706.

*To all whom it may concern:*

Be it known that I, ERNEST R. MITCHELL, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Vehicle-Sash Fasteners, of which the following is a specification.

My invention relates to certain improvements in sash fasteners for the windows of vehicles such as automobiles, carriages and railway cars, where the sash is adapted to enter a well in the frame of the vehicle when the window is open and is adapted to rest on a sill when the window is closed.

One object of my invention is to prevent the rattling of the window sash; and a further object is to lock the sash when in its closed position. These objects I attain in the following manner, reference being had to the accompanying drawings, in which:—

Figure 1, is a vertical sectional view of sufficient of a vehicle body to illustrate my invention; the window sash being in the closed position; Fig. 2, is a section on the line 2—2, Fig. 1, showing the fastener bearing upon the sash; Fig. 3, is a view similar to Fig. 2, with the fastener released; Fig. 4, is a perspective view of the fastener; Figs. 5 and 6, are detached perspective views of parts of the fastener; Fig. 7, is a sectional view of the arm shown in Fig. 5; and Fig. 8, is a view illustrating a cushion roller carried by one of the elements of the fastening device.

A is the frame of the vehicle body having a roof rail  $a$ , an outside belt  $a'$  and an inside belt  $a''$ ; the space between these two belts forming a channel or well  $c$  for the sash.

B is the sash made in the ordinary manner and having its upper edges rounded as shown, and in the present instance, I secure a curved metallic bearing plate  $b$  to the sash with which the fastening device comes in contact.

On the outside belt  $a'$  is secured a fence iron  $c'$  which retains the sash against any inward movement when in the position illustrated in Fig. 1; the side rails  $a^3$  retaining the sash against outward movement.

I provide a simple locking and anti-rattling device which when applied to the window frame is not exposed to view and does

not interfere with the interior finish of the vehicle.

D is the body portion of the device having bearings for the spindle  $e$  which forms part of the lever E, in the present instance this spindle is squared at  $e'$  and is adapted to a squared opening  $f$  in the bearing arm F, so that it must turn with the lever E. The hub of this bearing arm is many sided and the sides are concaved, as shown in Figs. 5 and 7 so that the arm will be held in either of its two positions by the spring  $g$  which rests under the ends of the body portion D. The end of the arm  $f'$  is recessed to fit the rounded end of the sash B, as shown, so that when it is in the locked position, as illustrated in Figs. 1 and 2, it will bear firmly upon the sash and hold it not only against vertical movement but against any lateral movement, thus preventing rattling and at the same time preventing the sash being raised from the outside. In some instances I may provide a cushion  $f^2$  of yielding material, either in the form of a roller or in the form of a block, which is secured to the arm F, as illustrated in Fig. 7; the roller being mounted in the present instance on a pin  $f^3$  carried by the arm.

The body portion D of the device is inserted in the channel  $a^4$  in the roof rail, as illustrated in Figs. 1 and 2, and consequently is not exposed, and the only part of the fastening exposed is the extreme end of the lever E, which projects on the inside, and by operating this lever the fastening can be moved either to lock or unlock the sash. It cannot be tampered with from the outside as it is entirely inclosed within the recess in the roof rail.

By making the hub of the arm F concaved as above noted, the spring fits closely to the hub, especially at the extreme edges and prevents any movement of the arm without first lifting the spring.

By making the three sides of the hub concaved the device can be arranged to fit right and left hand windows by simply shifting the hub.

I claim:—

1. The combination of a window frame of a vehicle, having a sash, said frame having a recess in the upper rail, a sash fastener mounted in the recess, said fastener having



a lever extending between the inside of the sash and the frame of the window and having an arm bearing against the top of the sash so as to lock the sash against upward movement.

2. The combination of a window frame of a vehicle, a sash mounted therein, the upper rail of the frame being recessed to receive the upper edge of the sash, said upper edge of the sash being rounded, a sash fastener mounted in the recess and having a lever arm extending below the upper rail and exposed on the interior of the vehicle, a grooved arm carried by the lever and adapted to bear upon the rounded upper surface of the sash, a spring for retaining the arm in position, preventing the lifting of the sash and holding the sash against lateral movement.

3. The combination of a window frame, a sash mounted therein, said frame having a channel in its upper surface to allow for the movement of the sash, a sash fastener mounted in the channel, the body portion of the sash fastener having bearings, a transverse pin mounted in the bearings, a lever secured to the pin and extending through the channel on the inner side of the sash and exposed

to the inside of the window frame, with a bearing arm carried by the spindle and adapted to rest upon the upper edge of the sash to lock said sash in a closed position.

4. The combination of a window frame of a vehicle, a sash mounted therein, the upper edge of the sash being rounded, the upper portion of the frame being channeled so as to allow the sash to be raised when being moved to its closed position, a sash fastener within the channel and having an operating lever extending below the channel on the inner side of the sash and also having an arm connected to the lever and grooved to bear upon the rounded upper end of the sash, said bearing arm having a many sided hub, each side being concaved, with a spring adapted to bear upon the concaved portions of the hub so that the arm is held in the position to which it is adjusted.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ERNEST R. MITCHELL.

Witnesses:

WM. E. SHUPE,  
WM. A. BARR.

It is hereby certified that Letters Patent No. 935,389, granted September 28, 1909, upon the application of Ernest R. Mitchell, of Philadelphia, Pennsylvania, for an improvement in "Vehicle-Sash Fasteners," were erroneously issued to said Mitchell as owner of the entire interest, whereas said Letters Patent should have been issued to the inventor, *Ernest R. Mitchell, and Horace Ervien, of Ogontz, Pennsylvania, jointly*, said Ervien being assignee of one-half interest in said invention as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 19th day of October, A. D., 1909.

[SEAL.]

C. C. BILLINGS,  
*Acting Commissioner of Patents.*