G. F. GULLBORG.

SASH STRIP FASTENER.

APPLICATION FILED MAR. 28, 1917.

1,240,044.

Patented Sept. 11, 1917.

Fig. 1.

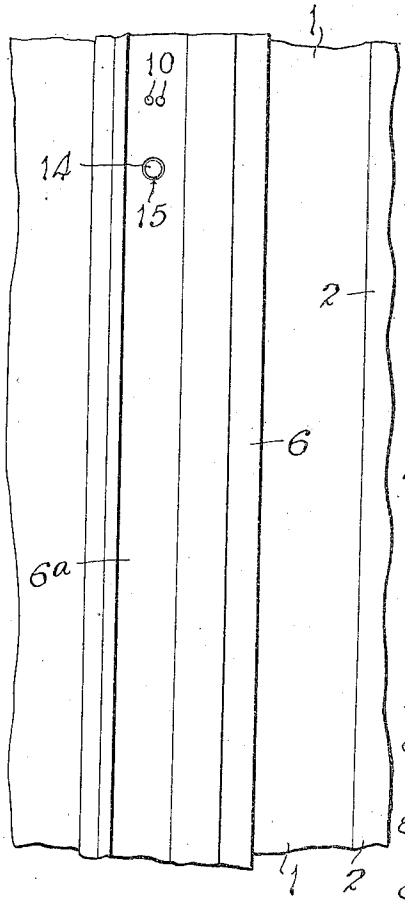


Fig. 3.

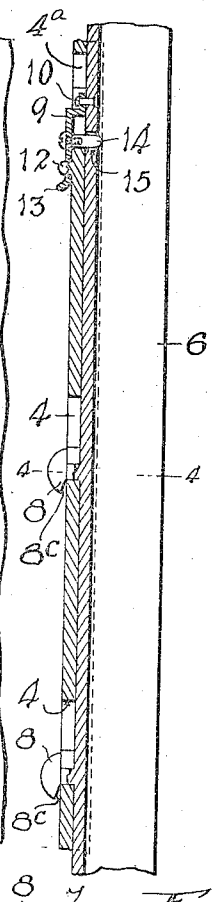


Fig. 2.

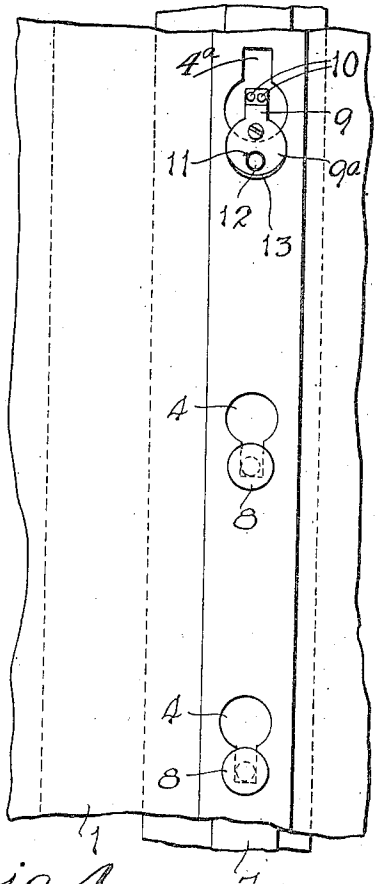


Fig. 4.

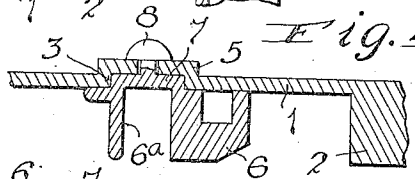


Fig. 5.

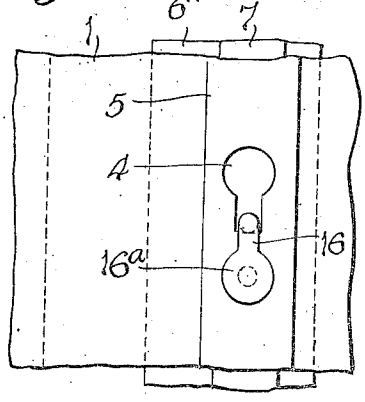
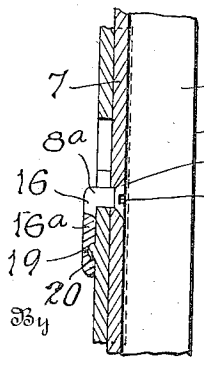


Fig. 6.



Inventor

G. F. GULLBORG

By N. S. Hill

Attorney

UNITED STATES PATENT OFFICE.

GUSTAF F. GULLBORG, OF RENOVA, PENNSYLVANIA.

SASH-STRIP FASTENER.

1,240,044. Specification of Letters Patent. Patented Sept. 11, 1917.

Application filed March 28, 1917. Serial No. 158,036.

To all whom it may concern:

Be it known that I, GUSTAF F. GULLBORG, a citizen of the United States, residing at Renova, in the county of Clinton, State of Pennsylvania, have invented a new and useful Sash-Strip Fastener; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to a window sash retaining strip, and has for its object to provide a device of this character which embodies novel features of construction whereby it can be readily placed in position or removed therefrom by the manipulation of a single locking member, thereby avoiding the use of several screws which are not only difficult to place in position and remove, but which frequently have the heads thereof mutilated to such an extent as to necessitate the removal of the screws by drilling.

Further objects of the invention are to provide a window sash retaining strip which is comparatively simple and inexpensive in its construction, which can be easily manipulated without any special tools, and which will save a large number of screws when used upon the windows of railway cars.

With these and other objects in view, the invention consists in certain novel combinations and arrangements of the parts as will more fully appear as the description proceeds, the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a side elevation of the inside of a portion of a window jamb provided with a removable sash retaining strip constructed in accordance with the invention.

Fig. 2 is a similar view, looking at the window jamb from the opposite side thereof.

Fig. 3 is a vertical sectional view through the window jamb and sash retaining strip.

Fig. 4 is a horizontal sectional view on the line 4—4 of Fig. 3.

Figs. 5 and 6 are detail views showing a modified form of the invention.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, which illustrate one embodiment of the invention, the numeral 1 designates a portion of the jamb of one of the window frames of an ordinary railway coach, a fixed sash retaining strip 2 projecting inwardly from the outer edge of the jamb, while a groove 3 extends along the face of the jamb in a spaced and parallel relation to the fixed sash retaining strip 2. A series of key-hole slots 4 extend through the base of the groove 3, the back or outer face of the jamb being provided with a rib 5 which corresponds to the groove 3.

The removable sash retaining strip 6 is formed with a rib 7 which fits within the groove 3 and has a limited sliding movement therein to admit of the manipulation of the removable strip 6 which is incident to placing it in position or removing it therefrom. This strip 6 coöperates with the fixed strip 2 to provide the usual channel within which the edge of the window sash is slidably received.

Headed studs 8 project rearwardly from the rib 7 of the removable sash retaining strip 6 and are arranged to interlock with the narrow ends of certain of the key-hole slots 4 to lock the removable strip 6 in position. It will be obvious, however, that when the strip 6 is moved longitudinally to bring the heads of the studs 8 opposite the enlarged ends of the key-hole slots 4 the strip 6 can be bodily lifted out of position. The studs 8 may be beveled at 8^c so as to slide freely into engagement with the key-hole slots.

Suitable locking means is provided for holding the removable sash retaining strip 6 against longitudinal movement and preventing the headed studs 8 from being accidentally disengaged from the key-hole slots 4. This locking means, as shown more clearly by Figs. 2 and 3, may include a Z-shaped spring strip 9 which has one arm thereof secured by suitable fastening members 10 to the sash retaining strip 6, the opposite arm thereof terminating in an enlarged and substantially circular head 9^a. This Z-shaped spring strip 9 is used in connection with an inverted key-hole slot 4^a, the outer arm of

the strip having substantially the same configuration as the inverted key-hole slot so that it can be moved bodily through the inverted key-hole slot when brought into registry therewith. The end of the outer arm of the strip 9 is provided with an opening 11 adapted to be sprung into engagement with a lug 12 projecting from the window jamb for the purpose of locking the sash retaining strip against movement, the said end of the outer arm being flared outwardly at 13 so that it will readily spring over the lug 12 when the sash retaining strip 6 is moved downwardly to bring the headed studs 8 into an interlocking engagement with the key-hole slots 4. A plunger or button 14 is carried by the outer arm of the Z-shaped strip 9 and projects through an opening 15 which extends through the sash retaining strip 6 and communicates with a channel 6^a therein. When it is desired to release the locking means the button 14 is pressed inwardly with a pencil or similar blunt instrument and the outer arm of the Z-shaped strip 9 thereby sprung out of engagement with the lug 12, whereupon the sash retaining strip 6 can be moved upwardly to disengage the headed studs 8 from the key-hole slots 4. The sash retaining strip can thus be easily removed or placed in position without removing any screws or other fastening members, and without the use of any special tools.

A slight modification is shown by Figs. 5 and 6, in which the headed studs 8^a of the sash retaining strip are rotatable, the heads 16 thereof projecting laterally from one side of the studs and terminating in enlarged ends 16^a which correspond in size and shape to the enlarged ends of the key-hole slots 4. The ends of the studs 8^a which extend through the sash retaining strip 6 are enlarged at 17 and formed with kerfs 18 which can be engaged by an ordinary screw-driver for the purpose of rotating the studs to swing laterally projecting heads 16 of the studs into or out of registry with the key-hole slots. The enlarged ends 16^a of the heads 16 may be provided on their inner faces with recesses 19 adapted to be sprung into an interlocking engagement with noses 20 projecting from the inner face of the window jamb. When the laterally extending heads 16 of the studs 8^a are swung downwardly out of registry with the key-hole slots 4, they will engage the window jamb to hold the sash retaining strip 6 securely in position, and the depressions 19 will spring into engagement with the noses 20 and prevent the studs from being accidentally moved or jarred into inoperative position. In order to remove the sash retaining strip, however, it is merely necessary to rotate the studs 8^a a half revolution and thereby swing the lateral heads 16 thereof upwardly into registry with the key-hole slots, whereupon the sash retaining strip can be lifted out of position.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A window frame including a jamb provided with a longitudinally extending groove and having key-hole slots in the base of the groove, a sash retaining strip adapted to be fitted within the groove, headed studs projecting from the strip and arranged to interlock with certain of the key-hole slots, a spring locking strip formed with a resilient overhanging arm which has substantially the same configuration as the last mentioned key-hole slot through which it is adapted to be inserted, and means co-operating with the resilient overhanging arm to lock the strip in operative position.

2. A window frame including a jamb provided with a longitudinally extending groove and having key-hole slots in the base of the groove, a sash retaining strip slidable within the groove, headed studs projecting from the strip and arranged to interlock with certain of the key-hole slots, a lug projecting from the window jamb adjacent another of the key-hole slots, and a spring locking strip formed with a resilient overhanging arm adapted to be inserted though the last mentioned key-hole slot and brought into engagement with the lug by the longitudinal movement of the strip.

3. A window frame including a jamb provided with a longitudinally extending groove and having key-hole slots in the base of the groove, a sash retaining strip formed with a rib which is slidable within the groove, headed studs projecting from the strip and arranged to interlock with certain of the key-hole slots, a lug projecting from the window jamb adjacent another of the key-hole slots, a spring locking strip formed with a resilient overhanging arm adapted to be inserted through the last mentioned key-hole slot and sprung into engagement with the lug, and a plunger projecting from the arm of the spring strip and extending through the jamb so that by pushing upon the plunger the spring strip can be sprung away from the lug.

4. A window frame including a jamb provided with a longitudinally extending groove and having a series of upright key-hole slots and an inverted key-hole slot in the base of the groove, a sash retaining strip formed with a rib which is slidable within the groove, headed studs projecting from the strip and arranged to interlock with the upright key-hole slots of the jamb, a lug projecting from the jamb adjacent the inserted key-hole slot, a spring locking strip formed with an overhanging arm which has an enlarged end and corresponds in shape

to the inverted key-hole slot so as to be moved through the same when brought into registry therewith, said overhanging arm being formed with an opening adapted to be sprung into engagement with the before mentioned lug, and means for springing the overhanging arm out of engagement with the lug.

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

GUSTAF F. GULLBORG.

Witnesses:
A. B. HOLLENGREN,
C. S. SVENSSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."