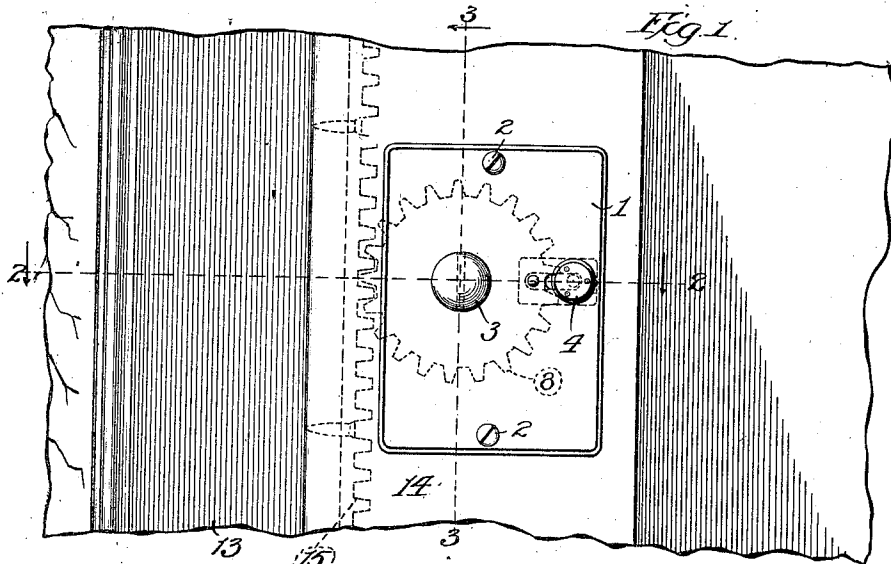
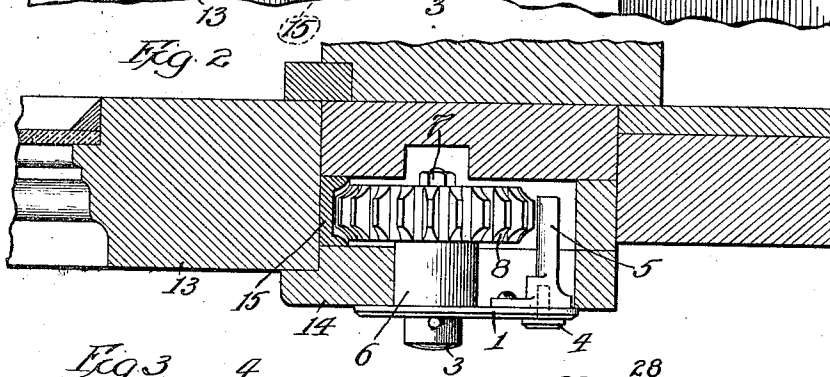
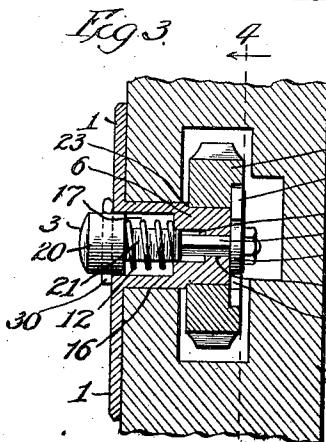
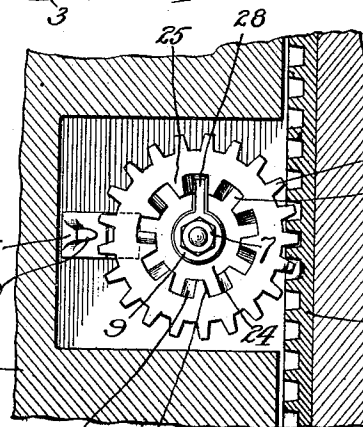


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SASH FASTENER.

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944,542.

Patented Dec. 28, 1909.



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GEORGE HENRY CREASE-WILLIAMS, OF BUENOS AYRES, ARGENTINA.

SASH-FASTENER.

944,542.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE HENRY CREASE-WILLIAMS, a subject of the King of England, and resident of Calle de 25 de Mayo No. 240, in the city of Buenos Ayres, Argentina, merchant, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

This invention relates to improvements in window sash fasteners the object of which is to provide a fastener for securing a window in any desired open position, or in a closed position, and securely lock the window in any position to which the sash may be adjusted.

The invention especially relates to that form of windows in which the sash slides vertically in the frame and is particularly adapted for car windows.

The invention will be more fully described in connection with the accompanying drawings and will be more particularly pointed out and ascertained in and by the appended claims.

In the drawings:—Figure 1 is a view in front elevation of that portion of the lock which is secured to the frame of the window. Fig. 2 is a sectional view on line 2—2 of Fig. 1. Fig. 3 is a sectional view on line 3—3 of Fig. 1. Fig. 4 is a sectional view on line 4—4 of Fig. 3.

Like numerals of reference designate similar parts throughout the different figures of the drawings.

As shown the sash is indicated at 13 and the frame at 14 and the sash is provided with a rack 15. A journal support is provided for anchoring to the frame 14 and as shown said support comprises a plate 1, adapted to be fastened to the inner face of the frame, and a projection journal 6 adapted to extend into a suitable recess formed in the frame 14. Said journal 6 is reduced in size at its inner end to form a shoulder 16 and the journal member is preferably formed cylindrical throughout its length. The journal 6 is provided with a bore comprising an enlarged portion 17, which may be cylindrical, a reduced portion 18 and a further reduced portion 19 which latter is hexagonal.

A lock actuating member preferably in the form of a plunger 3 is disposed in the bore of the journal 6 and on its outer end said plunger is provided with a button 20 whereby it may be manually operated. The plunger 3 is reduced at 21 and a spring is

disposed in the enlarged portion 17 of the bore and is interposed between the shoulder thereof and the button so as to normally thrust the plunger outwardly. The inner end 22 of the plunger is preferably hexagonal and engages the hexagonal portion 19 of the bore to provide a longitudinally slidable and nonrotatable mounting for the plunger. A gear wheel 8 is disposed on the reduced end of the journal 6 in a manner to mesh with the rack 15 and said gear on its outer face, engages a shoulder 23 on the journal 6. On its opposite end said gear wheel is provided with locking and releasing portions preferably formed by recessing the gear at 24 and notching the peripheral portions of the recess as indicated at 10. The notches 10 are effected so as to provide teeth 25 having locking portions 26 on one side and releasing portions 27 on the other side. A locking element 9 is secured to the plunger 3 by a nut 7 and is provided with a radially disposed extension 28 adapted to cooperate with the locking and releasing portions of the teeth 25 in the performance of its function. The spring serves to normally hold the plunger in the position shown in Fig. 4 but when the button 20 is depressed the locking element will be thrown out of operative proximity with the teeth 25 to permit free rotation of the gear wheel 8.

In order to permanently lock the window sash in any position to which it may be shifted, a lock 5 is provided and comprises a U-shaped locking portion 29 adapted to be shifted into and out of engagement with the teeth of the gear wheel 8 as clearly shown in Fig. 4. A button 4, disposed in a slot in the plate 1, is connected with the lock 5 and affords means whereby the latter may be shifted into and out of locking relation with said gear wheel 8. If it is desired to lock the window by means of the plunger 3, a key 30 may be secured in the button 20 so as to prevent depression of the button and thereby retain the locking element 9 in the position shown in Fig. 3 whereby rotation of the wheel 8 will be arrested.

The operation is as follows:—With the parts in the position shown in Fig. 4 the sash 13 may be raised and the element 9 will engage the releasing portions 27 and will slide over the teeth 25 as the latter are advanced toward the element 9, the frame permitting inward movement of the plunger 3. When the sash has been raised to the desired posi-

tion and the wheel 8 has ceased to rotate in a clockwise direction (as it will when the sash is being raised) the element 9 will engage the locking side 26 of one of the teeth 25 to prevent the weight of the sash from causing a downward movement thereof and rotating the wheel 8 in a contra-clockwise direction. It will thus be seen that the sash can be freely raised without depressing the plunger 3 and that it will be automatically locked by the element 9 as soon as upward pressure on the sash has been released. Should it be desired to lock the sash in an open position so that it cannot be raised beyond the open position to which it may have been adjusted the key 30 may be inserted in the button 20 so as to rigidly lock the element 9 in the base of the recess 24 so that the spring cannot release the plunger and permit the element 9 to ride over the teeth 25. If it should be desired to lock the window sash in a closed position so that it cannot be raised the button 4 may be shifted to engage the lock 5 with the teeth of the wheel 8 and this form of lock may also be used, if desired, to lock the window in any open position.

I claim:—

1. The combination with a window sash and frame, of a rack secured to the sash, a

gear wheel mounted in the frame and meshing with the rack, said wheel having teeth provided with locking and releasing portions, a non-rotatively and longitudinally slidable plunger extending through said wheel, a locking finger mounted on the end of said plunger and engaging said teeth, and a spring normally holding said finger in engagement with said teeth.

2. The combination with a window sash and frame, of a rack secured to the sash, a plate mounted on said frame and provided with a journal, a gear-wheel rotatably mounted on said journal and meshing with said rack, said gear wheel having teeth provided with locking and releasing portions, a plunger non-rotatively and slidably mounted in said journal and projecting there-through, a finger on the end of said plunger engaging said teeth, and a spring normally holding said finger in engagement with said teeth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE HENRY CREASE-WILLIAMS.

Witnesses:

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