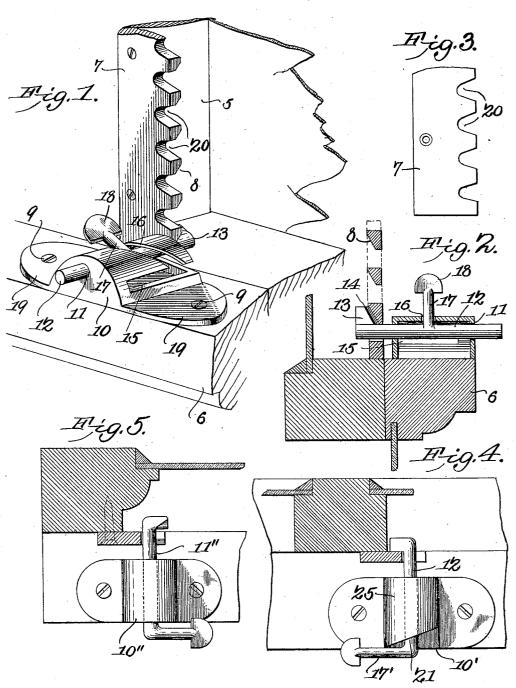
C. TAIT. WINDOW FASTENER. APPLICATION FILED MAY 15, 1906.



WITNESSES:

Cassius Tait, INVENTOR.

By Calmowtee

## UNITED STATES PATENT OFFICE.

CASSIUS TAIT, OF ST. JOSEPH, MISSOURI.

## WINDOW-FASTENER.

No. 860,769.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed May 15, 1906. Serial No. 316,990.

To all whom it may concern:

Be it known that I, Cassius Tair, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented a 5 new and useful Window-Fastener, of which the following is a specification.

This invention relates to sash-fasteners and has for its object to provide a comparatively simple and inexpensive device of this character capable of being 10 readily mounted on a window-sash and by means of which the sash may be securely locked in open or closed position and supported in open position at any desired adjustment.

A further object of the invention is to provide a 15 rack designed for attachment to one sash and a casing adapted to be secured to the adjacent sash, said casing being provided with a sliding bolt having a terminal inclined head adapted to engage the correspondingly inclined face of the adjacent tooth on the 20 rack whereby when the bolt is moved to operative position the sashes will be locked in engagement with each other.

A still further object of the invention is to generally improve this class of devices so as to increase their 25 utility, durability and efficiency as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, 30 and illustrated in the accompanying drawings, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of 35 this specification: Figure 1 is a perspective view of a portion of a window showing a sash fastener constructed in accordance with my invention in position thereon. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a side elevation of a portion of the 40 rack. Fig. 4 is a transverse sectional view illustrating a modified form of the invention. Fig. 5 is a similar view illustrating a still further modification.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved fastener is principally designed for locking sliding-window-sashes in open or closed position and by way of illustration is shown applied to a window of the ordinary construction in which 5 designates the upper sash and 6 the lower sash.

Secured to the side rail of the upper sash is a rack 7 the teeth of which project beyond the adjacent longitudinal face of the side rail and are inclined or beyeled at their rear faces as indicated at 8.

Secured to the top rail of the lower sash in any 55 suitable manner as by screws 9 is a casing 10 provided with alined openings 11 for the reception of a revo-

luble and longitudinally movable bolt 12. The bolt 12 is provided with a terminal head 13 one face of which is inclined or beveled as indicated at 14 for engagement with the correspondingly beveled face 60 8 of the teeth on the rack-bar whereby when the bolt is moved to operative position the inclined faces will interengage and thus clamp the sashes together.

Formed in the body of the casing 10 is a longitudinal slot 15 and communicating with said slot is a cam groove 65 or opening 16 through which extends a shank 17 provided with a terminal finger-piece 18 by means of which the bolt may be moved to operative and inoperative position. The casing 10 is preferably formed with laterally extending attaching ears 19 having openings 70 formed therein for the reception of the screws or similar fastening devices 9.

In operation when it is desired to lock the sashes in open or partially open position said sashes are moved longitudinally of the window frame until the desired 75 adjustment is effected after which the finger-piece 18 is moved longitudinally of the slot 15 until the shank 17 enters the cam groove 16 after which the finger-piece 18 is moved laterally within the cam groove 16 thus causing the inclined head of the bolt to engage the in- 80 clined face of the adjacent tooth and lock the sash in adjusted position. In order to release the sash it is merely necessary to move the finger-piece laterally in the opposite direction until the shank 17 enters the slot 15 in which position the head 13 may be readily 85 withdrawn from engagement with the teeth thus permitting the sash to be raised or lowered.

Attention is called to the fact that the rear walls of the sockets 20 are curved to conform to the adjacent walls of the head 12, while the cam shank 17 by engage- 90 ment with the walls of the slot 16 serves to partially rotate the head 12 and thus force the inclined face of the latter in engagement with the inclined face of the adjacent tooth on the rack.

In Fig. 4 of the drawings there is illustrated a modi- 95 fied form of the invention in which the cam slot 16 is dispensed with, one end of the casing 25 being inclined or beveled to form a cam face 21 adapted to engage the shank 17' of the operating bolt 11 when the latter is moved to operative position.

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In Fig. 5 of the drawings the opposite longitudinal edges of the casing 10" are disposed parallel to each other and the bolt 11" slidably mounted within the casing and movable longitudinally into engagement with the teeth on the rack-bar, being subsequently 105 turned laterally to effect the locking of the same, thus dispensing with both the cam slot 16 and the cam face 21.

It will of course be understood that the fasteners may be made in different sizes and shapes and be attached 110 either to the side rails of the sash or to the center or parting rail.

In some cases the head of the operating bolt and the teeth on the rack may be formed without the inclined or beveled faces.

From the foregoing description it is thought that the 5 construction and operation of the device may be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed is:

The combination with a pair of movable members, of a 10 rack secured to one of said members and provided with spaced recesses opening through the free edge of the rack

and defining a plurality of teeth each having its rear edge inclined or beveled, a casing secured to the adjacent member, and a revoluble and longitudinally movable bolt 15 mounted in the casing and provided with a terminal head adapted to enter the recesses in the rack, said head having one side thereof inclined or beveled for engagement with the inclined face of the adjacent tooth.

In testimony that I claim the foregoing as my own, I  $\,20\,$ have hereto affixed my signature in the presence of two witnesses.

CASSIUS TAIT.

Witnesses:

GEORGE E. JACKSON, ROBERT S. NICHOLS.