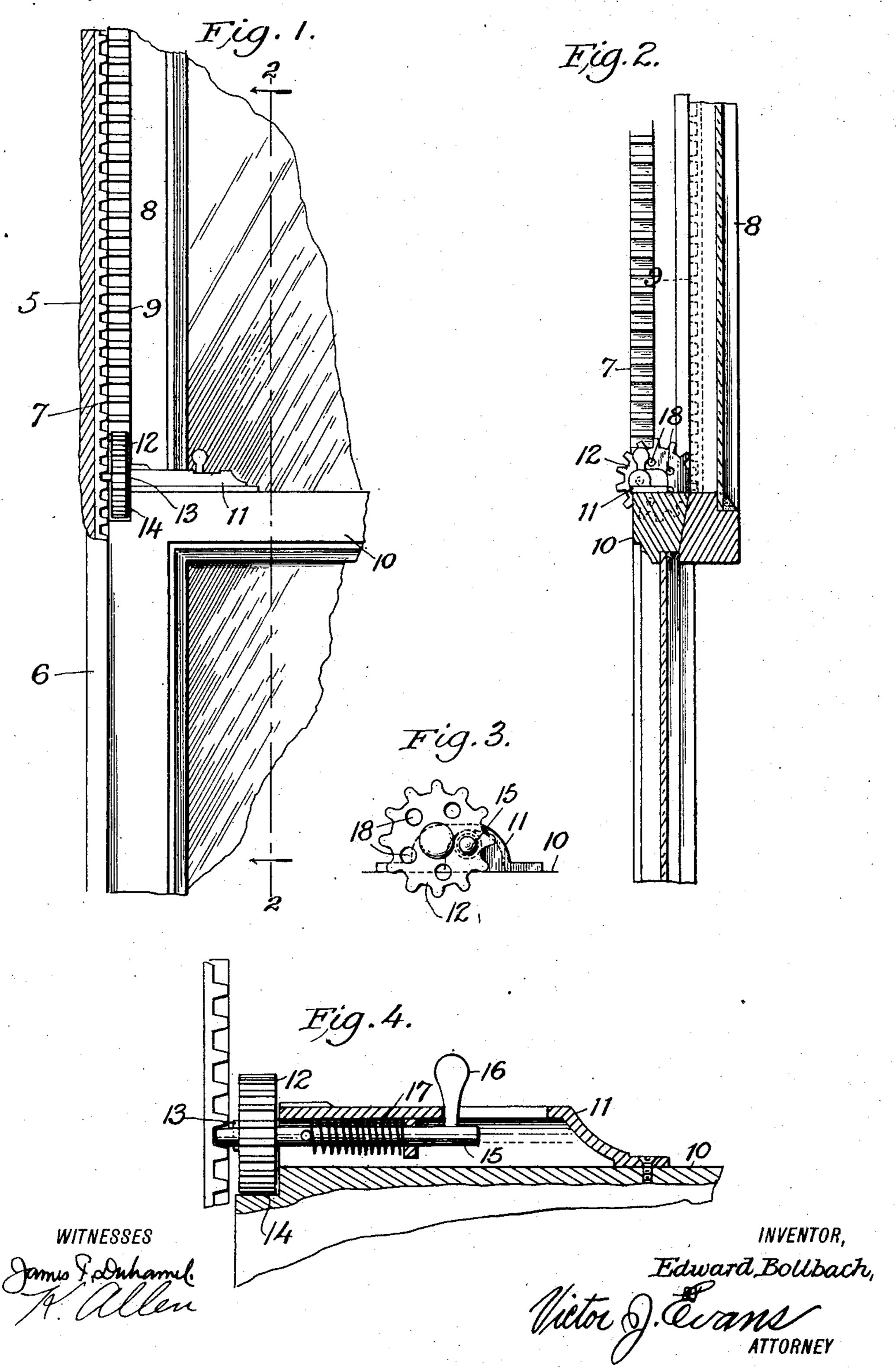
E. BOLLBACH.
WINDOW FASTENER.
APPLICATION FILED APR. 10, 1908.

919,311.

Patented Apr. 27, 1909.



## UNITED STATES PATENT OFFICE.

EDWARD BOLLBACH, OF NEW YORK, N. Y.

## WINDOW-FASTENER.

No. 919,311.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed April 10, 1908. Serial No. 426,284.

To all whom it may concern:

Be it known that I, EDWARD BOLLBACH, a citizen of the United States, residing at New York, in the county of New York and State of 5 New York, have invented new and useful Improvements in Window-Fasteners, of which

the following is a specification.

This invention relates to window fasteners and its object is to lock the sashes of a win-10 dow at any point of their movement and at any relative position, or they may be securely fastened when closed. All these points are more fully explained in the following specification, set forth in the claims and 15 illustrated in the drawings, where:

Figure 1 is an elevation of one side of the interior of a window showing the invention applied thereto. Fig. 2 is a sectional view through the sashes on the line 2—2. Fig. 3 20 is an end view of the bolt and gear wheel. Fig. 4 is a sectional view through the casing

of the latter.

This invention is adapted to be applied to | 25 cured thereto without any alteration or change to window sashes commonly used.

In the drawings the frame 5 within the securing strip 6 and in the runway for the sash has a rack bar 7 secured to it. This bar 30 may be a cast bar with teeth or a strip of crimped sheet metal has been found satisfactory and for economy may be used. On the inner face of the upper sash 8 and adjacent to the rack bar 7 is another similar 35 rack bar 9 and both of these bars extend the

whole length of the upper sash.

The lower sash 10 carries on its upper edge and in the corner adjacent to the rack bars a casing 11 carrying at its outer end a gear 40 wheel 12 mounted on a stud 13. A small portion of the lower sash is cut out as at 14 to accommodate the wheel 12 and the casing may be secured to the sash by its flanges and screws. The casing 11 incloses a bolt 15 con-45 trolled by a knob 16 but normally impelled forward by a spring 17 and adapted to enter and pass through one of the holes 18 and into engagement with the rack bar 7 and between two of its teeth thus securing the lower sash 50 against movement while so engaged.

The teeth of the gear wheel 12 mesh with those of the rack bar 9 and when free to move it works in engagement with said rack bar when the lower sash is raised, turning and offering 55 no hindrance to the movement of the sash if it is free from the influence of the bolt 15.

When, however, the bolt is passed through one of the holes 18 the wheel is locked from movement and is prevented running in the rack bar, thereby preventing the movement 33 of the sash and locking it. This locking of the sash may be accomplished at any point where the same is located when raised, or when the upper sash is lowered, or when either sash is away from its normal position, 65 thus making it possible to so lock the sashes together that there will be open space at the upper and lower end of the window. This above described locking does not, however, prevent the movement of the sashes on their 70 cords and the two are locked against movement up or down by the engagement of the bolt 15 with the rack bar 7. The bolt it will be seen, locks the gear wheel, which controls the upper sash, and the lower sash at 75 the same time and continues to do so until withdrawn.

This lock or fastener acts as a very simple method for not only locking the window to a window of ordinary construction and is se- | completely close it but affords means for 80 allowing one or both sashes to be opened to a slight degree for ventilation yet affording no means for a person to enter the room, the location of the lock at the maximum distance from the opening preventing a person 85 from the outside getting at it to withdraw

the bolt.

The simplicity and cheapness of the device makes it a very desirable piece of household hardware and minor changes may be made 90 in the construction and arrangement of its parts without departing from the essential features above described.

What I claim as new and desire to secure

by Letters Patent is:

1. In a window fastener, the combination with the frame and sashes, of engaging means on the frame and one of the sashes, of means constantly connected with one of the engaging means and carried by the other 100 sash and means for locking the same.

2. In a window fastener, the combination with a frame and sashes therefor, of a rotatable locking element carried by one of the sashes, means carried by the other of said 105 sashes for coöperation with said element, and means adapted to prevent rotation of said element and to be simultaneously locked to said frame.

3. In a window fastener, the combination 110 with the window frame having a rack bar, of a sash with a rack bar, a second sash, a

gear wheel on the latter to constantly engage and travel over the rack bar on the first sash, and a bolt adapted to engage the gear wheel to prevent its movement and to engage the

5 rack bar on the frame.

4. In a window fastener, the combination with a frame carrying a rack bar, of a sash with a rack bar, a second sash, a spring pressed bolt on same adapted to engage the rack bar on the frame, a gear wheel on the second sash meshing with the rack bar on the first sash to lock it when the bolt engages the rack bar of the frame.

5. In a window fastener, the combination

with the frame having a rack bar on its inner edge, of an upper sash with a rack bar on its inner face, a lower sash with a spring pressed bolt on its upper side, and a gear wheel meshing with the rack bar on the upper sash and having holes for the bolt to 20 pass through as it engages the rack bar on the frame.

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

EDWARD BOLLBACH.

Witnesses:

JAMES F. DUHAMEL, MAE W. CLINTON.