

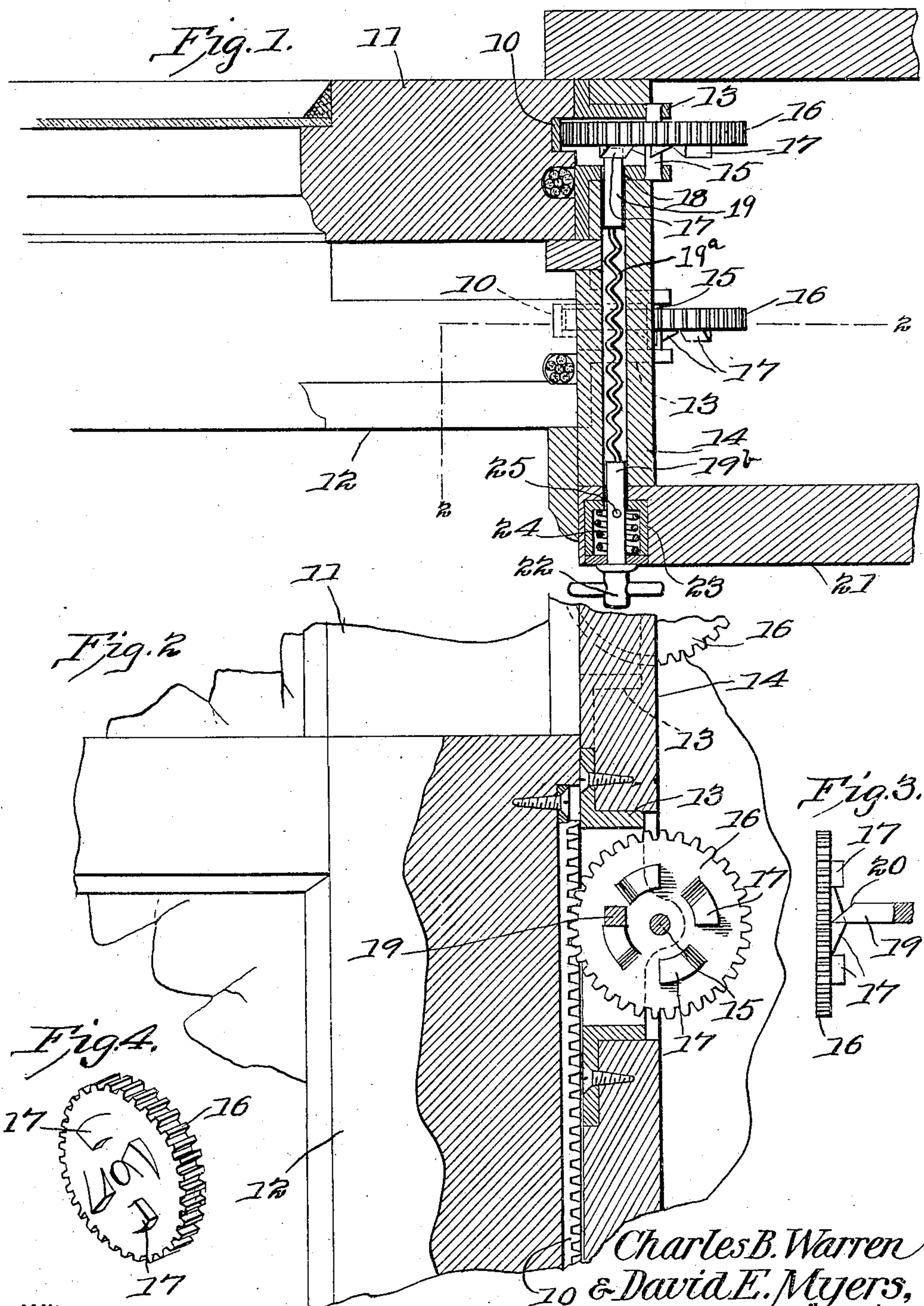
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C. B. WARREN & D. E. MYERS.

WINDOW SASH FASTENER.

APPLICATION FILED AUG. 10, 1905.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES B. WARREN AND DAVID E. MYERS, OF LORDSBURG,
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WINDOW-SASH FASTENER.

No. 814,177.

Specification of Letters Patent.

Patented March 6, 1906.

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To all whom it may concern:

Be it known that we, CHARLES B. WARREN and DAVID E. MYERS, citizens of the United States, residing at Lordsburg, in the county of Los Angeles and State of California, have invented a new and useful Window-Sash Fastener, of which the following is a specification.

This invention relates to improvements in sash stops and locks, and has for its object to provide a simply-constructed device of this character by means of which the sashes may be securely locked in either open or closed position.

Another object of the invention is to provide a simply-constructed device by means of which the sash may be freely moved in one direction, but locked from movement in the opposite direction.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a transverse section of a portion of a window-frame and one of its sashes with the improved devices applied. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail view of one of the combined ratchets and pinions and its lock-bar. Fig. 4 is a detached perspective view of one of the combined ratchets and pinions.

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

One of the improved devices will be employed for each of the sashes of the window, and the parts are alike for each sash, except that the ratchet-teeth on the locking-pinions are reversed in position, so that the description of one structure suffices for both.

The improved device comprises rack-bars 10, embedded in the outer faces of the side members 11 12 of the upper and lower sashes, and " housings " 13, attached to the cord-pulley " stile " member 14 of the casing and opposite the paths of the sashes, the housing for the upper sash being disposed just above the meeting-rails and the housing for the lower sashes being disposed just below the meeting-rails.

Pivoted upon shaft 15 in the housings are pinions 16 in constant engagement with the

gear-racks 10, each pinion being provided with spaced ratchet-teeth 17, extending from one side face, the teeth of the upper pinion being reversed in position from those upon the lower pinion, as shown.

The housings 13 are each provided with an aperture 18 through one side, and movably disposed in these apertures are pawls 19, the pawls having inclined ends, as at 20, so that the ratchet-teeth will positively engage the teeth when the pinions are moved in one direction and displace the pawls and pass them when moved in the opposite direction, as will be obvious. The pawls 19 are continued by spiral or extensible rods 19^a, extending approximately through the window-casing 21 and terminating in a bar 19^b, which is provided with a head and drop-ring 22.

Embedded in the casing 21 and surrounding the bars 19^b are sockets 23, in which springs 24 are disposed, said springs exerting their force by means of a pin 25, projecting from said bar, to maintain the bar yieldably in engagement with one of the ratchet-teeth.

The ratchet-teeth of the pinion of the upper sash will be so arranged that the pawl 19 will hold the upper sash from downward movement, but will permit free upward movement, while the ratchet-teeth of the pinion of the lower sash will be so arranged that the lower sash will be held by the adjacent pawl from upward movement, but may be moved freely downward without actuating the pawl.

When it is desired to elevate the lower sash or lower the upper sash, a simple pull outward upon the bars 19^b by the knob 22 will release the pinions and permit the sashes to be freely moved in either direction and will be instantly locked at any desired point when the knobs are released by the action of the springs, as will be obvious.

The device is simple in construction and can be readily applied to windows having various thicknesses of casings by elongating the spiral or extensible rods 19^a to the necessary extent.

All the parts except the head and ring 22 are concealed from view. Hence the presence of the device will not detract from the appearance of the window.

Having thus described the invention, what is claimed is—

1. The combination with a rack-bar of a

pinion mounted for rotation and in constant engagement with the rack-bar and provided with spaced ratchet-teeth, a pawl adapted to engage the ratchet-teeth, a lock-bar mounted
5 for movement toward and away from said pinion, an extensible connection between the pawl and lock-bar and a spring operating upon said bar to hold the pawl in yieldable engagement with one of said teeth.

10 2. The combination with a sash having a rack-bar disposed in one of its side members, a housing connected to the window-frame and provided with a transverse guide-aperture, a pinion having spaced ratchet-teeth
15 in one side face and rotatively mounted in said housing for constant engagement with said rack-bar, a pawl slidably mounted in the guide-apertures for engagement with the ratchet-teeth, a spring-actuated lock-bar,
20 and an extensible connection between the pawl and lock-bar.

3. The combination with a sash having a rack-bar disposed in one of its side members,

a housing connected to the window-frame and provided with a transverse guide-aper- 25
ture, a pinion having spaced ratchet-teeth in one side face and rotatively mounted in said housing for constant engagement with said rack-bar, a pawl mounted for sliding
movement in the guiding-aperture for engage- 30
ment with the ratchet-teeth, a lock-bar extending through the window-casing, an extensible spiral rod connecting the pawl and lock-bar, a socket embedded in said casing
and surrounding said bar, and a spring with- 35
in said socket and operating to maintain said pawl in yieldable engagement with said ratchet-teeth.

In testimony that we claim the foregoing as our own we have hereto affixed our signa- 40
tures in the presence of two witnesses.

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Witnesses:

CARL ALEX. JOHNSON,
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