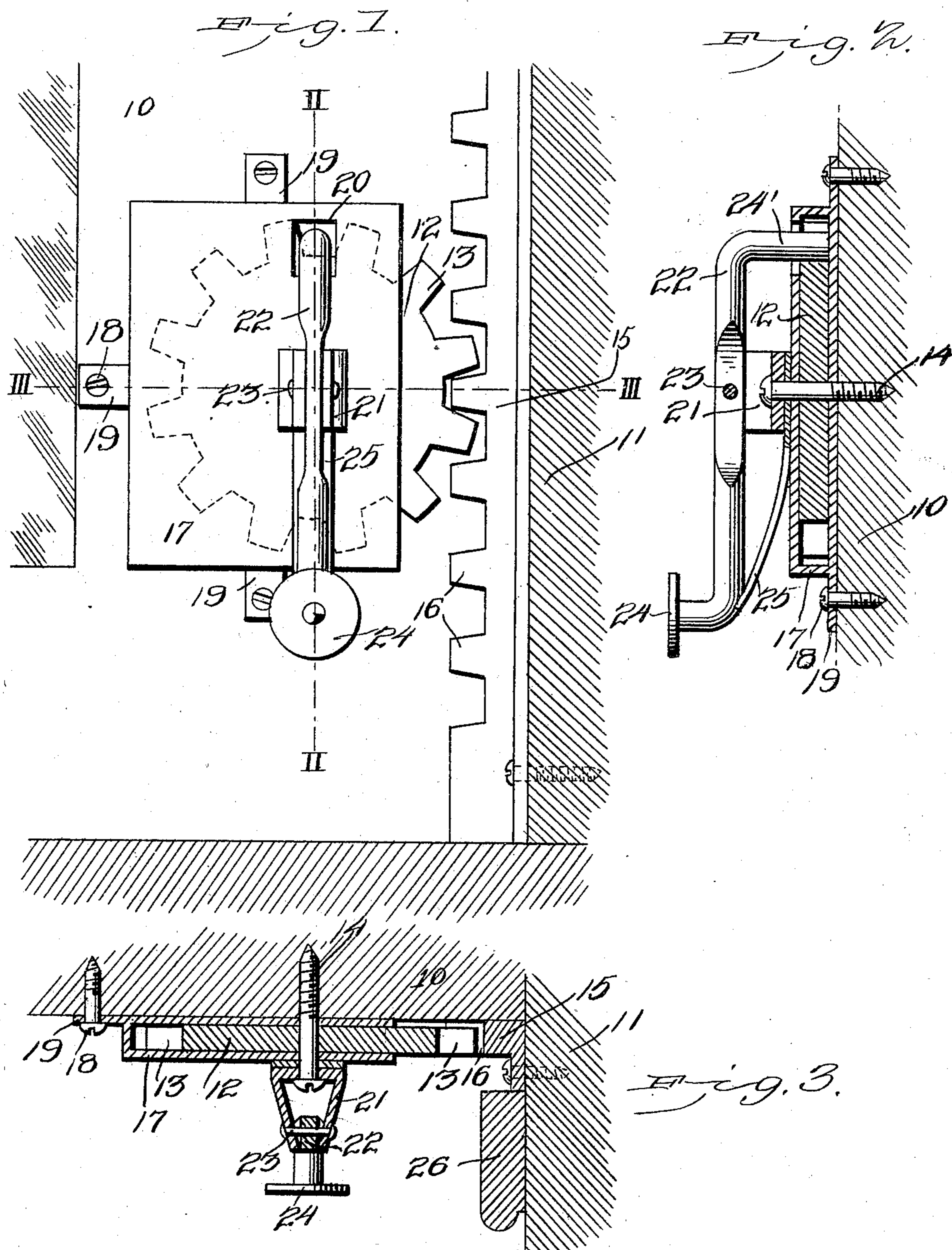


PATENTED APR. 14, 1903.

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NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES EDWARD CRAWFORD, OF CANYON, TEXAS.

WINDOW-LOCK.

SPECIFICATION forming part of Letters Patent No. 725,046, dated April 14, 1903.

Application filed August 20, 1902. Serial No. 120,397. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARD CRAWFORD, a citizen of the United States, residing at Canyon, in the county of Randall and State of Texas, have invented a new and useful Window-Lock, of which the following is a specification.

This invention relates to devices for securing window-sashes in their frames, and has for its object the production of a simply-constructed device whereby the sash may be locked at any desired point of elevation; and the invention consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, Figure 1 is a side elevation of one corner of a window-sash and a portion of the frame with the invention applied. Fig. 2 is a sectional view on the line II II of Fig. 1. Fig. 3 is a transverse section on the line III III of Fig. 1.

The improved device may be applied to any of the ordinary forms of sliding window-sash, and for the purpose of illustration the invention is shown applied to a conventional form of sash (represented at 10) slidably disposed in the frame 11.

The improved device consists in a toothed wheel 12, having spaced teeth 13 extending from its rim, the wheel pivotally supported upon the sash 10, adjacent to the frame 11, by a pivot-pin 14, as shown.

Attached to the inner face of the casing 11, adjacent to the wheel 12, is a rack-bar 15, having spaced teeth 16, adapted to be engaged by the teeth 13 upon the wheel 12 as the sash is moved vertically. By this arrangement it will be obvious that as the sash is moved vertically the wheel 12 will be rotated by engagement with the rack 15 16, and any device which will prevent the rotation of the wheel 12 will serve as a lock to hold the sash at any desired point of elevation, and the manner of constructing and arranging this locking means is one of the principal features of my invention.

The wheel 12 is inclosed in a casing 17, attached in any suitable manner to the sash, as by screws 18, engaging lugs 19, projecting from the casing, the casing having an aperture 20 through one side opposite the path of

the teeth 13, so that the interstices between the teeth will pass successively beneath the apertures as the wheel is revolved, as will be evident from Figs. 1 and 2.

Supported upon the casing 17 by the pivot-pin 14 is a clip 21, having spaced side members affording a support to the lock-lever 22, the lock-lever pivotally supported between the ears of the clip 21 by a pivot 23 and with one end extending over the aperture 20 and turned at right angles and adapted to enter the aperture and successively engage the interstices between the teeth 13, as shown in Fig. 2. The opposite end of the lever 22 will be provided with an operating finger-button 24, and the lever will be supported normally in its outward position and with the end 24 normally in engagement with the wheel 12 by a spring 25, the spring supported in place by the pivot-bolt 14, as shown in Fig. 2. By this simple means the pivot-bolt 14 performs a threefold function: first, as a means for pivotally securing the wheel 12 in position; secondly, as a means for holding the clip 21 in position, and, thirdly, as a means for supporting the spring 25. The clip 21 is thus maintained at all times in position with relation to the wheel 12, so that the lever is likewise maintained with its end 24 in operative relations to the teeth 13. This is an important feature of the invention and adds materially to its efficiency and operativeness and also increases its simplicity by reducing the number of parts. The device thus makes a very complete, compact, and simple structure formed of few parts, and therefore not liable to get out of order.

The spring 25 will be formed forked at its outer end to engage the sides of the lever 22 to prevent lateral movement between the spring and lever. By this simple means the single holding means 14 will be sufficient to support the spring 25, which coacting with the forked outer end prevents any lateral movement or disengagement of the spring.

Being thus arranged the action is as follows: When the sash is to be elevated or depressed, as the case may be, the button end 24 of the lever 22 is depressed, which will release the end 24 from engagement with the wheel, so that the wheel is likewise released and permitted to freely revolve as the sash is

moved. When the sash has been moved to the desired position, the button is released, when the spring member 25 will at once act upon the lever and throw the end 24' into the
 5 next interstice between the teeth 13 that passes beneath the aperture 20 and again lock the sash in position by preventing the further rotation of the wheel. By this simple means the sash may be firmly locked at any
 10 desired point and in position to be readily released when required.

The parts are all very simple in construction and may be manufactured very cheaply and applied to any form of sash which moves
 15 vertically in its frame.

The rack 15 will be concealed by the stop 26, ordinarily employed upon window-frames, as indicated in Fig. 3, so that the presence of the device will not be a detriment to the win-
 20 dow.

The casing 17 may be "struck up" from sheet metal, if preferred, but may be constructed in any other desired manner, and all the parts may be of any material desired and
 25 of any fanciful shape or configuration and may be modified in minor particulars without sacrificing any of the advantages of the invention.

Having thus described my invention, what
 30 I claim is—

1. In a sash-fastener, an inclosing casing attached to the sash, a toothed wheel pivotally supported in said casing, a toothed rack supported upon the frame in position to be

engaged by said wheel, a clip supported upon
 35 said casing by the same pivot-bolt which supports said toothed wheel, and a spring-controlled lever movably supported in said clip and adapted to successively engage the teeth
 40 of said wheel, whereby said lever is maintained in concentric position with relation to said wheel and said wheel locked in position with relation to said rack, substantially as described.

2. In a sash-fastener, an inclosing casing
 45 attached to the sash, a toothed wheel pivotally supported in said casing, a toothed rack supported upon the frame in position to be engaged by said wheel, a clip supported upon
 50 said casing by the same pivot-bolt which supports said toothed wheel, a lever movably supported in said clip and adapted to successively engage the teeth of said wheel, and a spring having a perforation at one end adapted to engage said pivot-bolt between
 55 said clip and casing and with the other end extended into engagement with said lever, whereby said lever is maintained normally in engagement with said teeth, substantially
 60 as described.

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

JAMES EDWARD CRAWFORD.

Witnesses:

W. J. PATTON,

C. J. STEVENSON.