No. 648,120. Patented Apr. 24, 1900.

L. BROWN.

SASH FASTENER.

(Application filed Sept. 22, 1899.)

(No Model.)

Fig. 1.

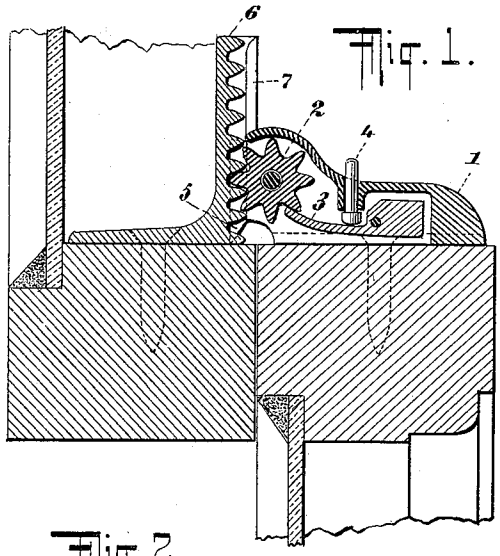


Fig. 2.

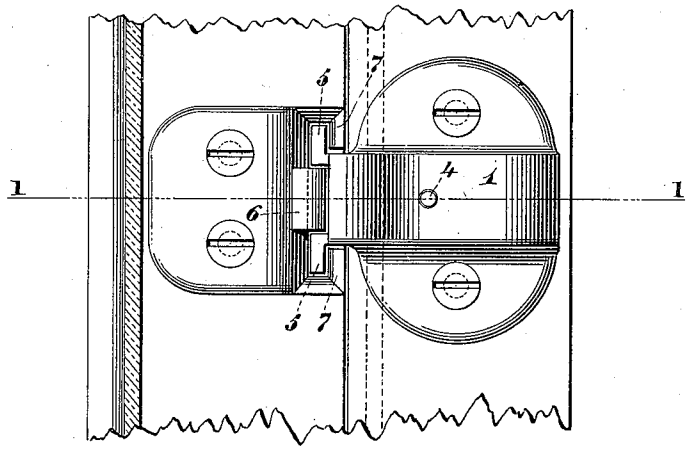
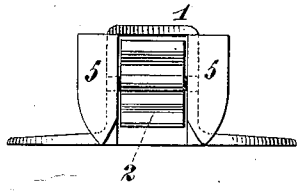


Fig. 3.



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UNITED STATES PATENT OFFICE.

LEWIS BROWN, OF NEW YORK, N. Y.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 648,120, dated April 24, 1900.

Application filed September 22, 1899. Serial No. 731,363. (No model.)

To all whom it may concern:

Be it known that I, LEWIS BROWN, a citizen of the United States, residing in the borough of Brooklyn, city of New York, and State of New York, have invented certain new and useful Improvements in Window-Sash Fasteners, of which the following is a specification.

My invention relates to window-sash fasteners or locks, and has for its object to provide a fastening or locking device for window-sash which will automatically fasten or lock the sash when in a closed or nearly-closed position and which will center the sash if loose in the window-frames.

Having reference to the accompanying drawings, which form part hereof, Figure 1 is a vertical longitudinal sectional view of my device, taken on the line 1 1 of Fig. 2. Fig. 2 is a top view of the same. In both Figs. 1 and 2 the device is shown applied to the sash of a window. Fig. 3 is a face or end view of one of the members, showing the centering-shoes.

My fastening or locking device comprises two members—a ratchet and a rack. The ratchet member consists of a housing 1, wherein are pivoted a pinion 2 and an overbalanced pawl 3, adapted to engage the pinion 2. A vertical plunger 4 is supported by the housing passing through it, the lower end resting on the pawl 3 and the upper end being exposed to afford means for tripping the pawl. The housing 1 at the end in which the pinion is pivoted is spread out and formed into two centering-shoes 5 5, the lower ends of which are pointed and whose use will be explained farther on. The rack member consists of a rack 6, on each side whereof are guiding ways or channels 7 7, adapted to be traversed by the shoes 5 5 and chamfered at their upper ends. Both members are provided with suitable flanges adapting them for securement to the upper and lower sashes, respectively. The ratchet member is adapted to be placed upon the upper part of the lower sash and the rack member upon the upper side of the lower part of the upper sash. Now supposing the window to be open and it is being closed, the device will work as follows: The shoes 5 5 will engage the chamfered ends of the channels or ways 7 7 and will draw the parts of the sash to which they are fastened toward each other, so that the rack and pinion will engage, and at the same time preventing the sash crowding them too near together and also centering them latitudinally. The rack and pinion being so constructed that they will come into engagement as soon as they have been centered, the pinion will run on the rack 6, being free so to do by the position of the pawl 3. As soon as the pinion and rack are in engagement the overbalanced pawl 3 prevents any movement toward opening the window, and the shoes 5 5 remaining in the ways or channels 7 7 hold the rack and pinion in engagement and prevent the sash being pried apart to disengage them. To unlock the fastener to permit the opening of the window, the pawl 3 is tripped by pressing upon the exposed end of the plunger 4, thus permitting the pinion to run backward, and upon removing the pressure from the plunger the device assumes its normal condition—that of being ready to engage and lock if the pinion and rack are out of engagement and of being locked if they are in engagement.

It will be seen that my fastener acts to lock the window automatically whenever the window is in a closed or partly-closed position, and when the window is opened it automatically assumes its locking position, and that the device centers itself latitudinally and backward and forward and will lock even if for any cause, such as shrinking of sash-cords, the sash do not close tightly. The amount of play which can be centered is dependent upon the chamfer and the shoes, and the length of rack determines at what point toward closing the sash are to lock.

What I claim as my invention, and desire to secure by Letters Patent, is—

A window-sash-fastening device comprising two members adapted to be secured to the upper and lower sash respectively of a window; one member consisting of a housing 1, a pinion 2, a pawl 3, a tripping-plunger 4, and centering-shoes 5 5; the other member consisting of, a rack 6 adapted to be engaged by the pinion 2, and chamfered ways or channels 7 7 adapted to be traversed by the centering-shoes 5 5, all arranged and adapted to automatically center the device and lock the sashes whenever in a closed or nearly-closed position.

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