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N. G. NELSON.
WINDOW SASH LOCK.

APPLICATION FILED FEB. 28, 1913. RENEWED SEPT. 14, 1914.

1,155,084.

Patented Sept. 28, 1915.

Fig. 1.

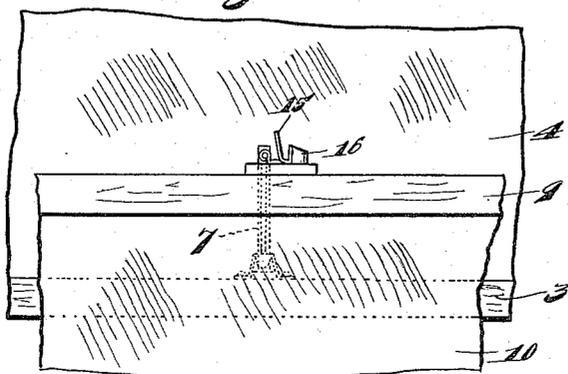


Fig. 2.

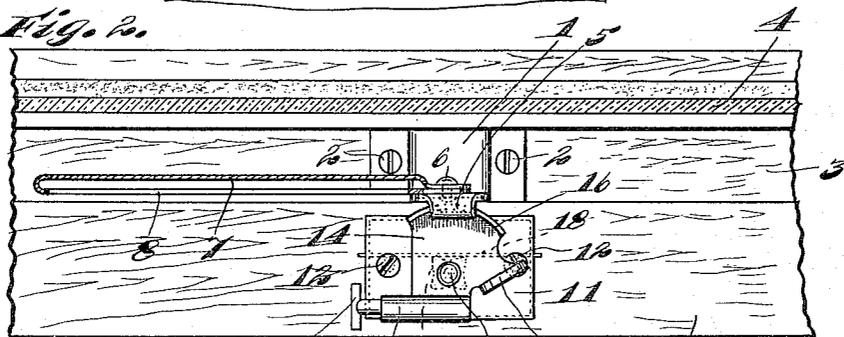
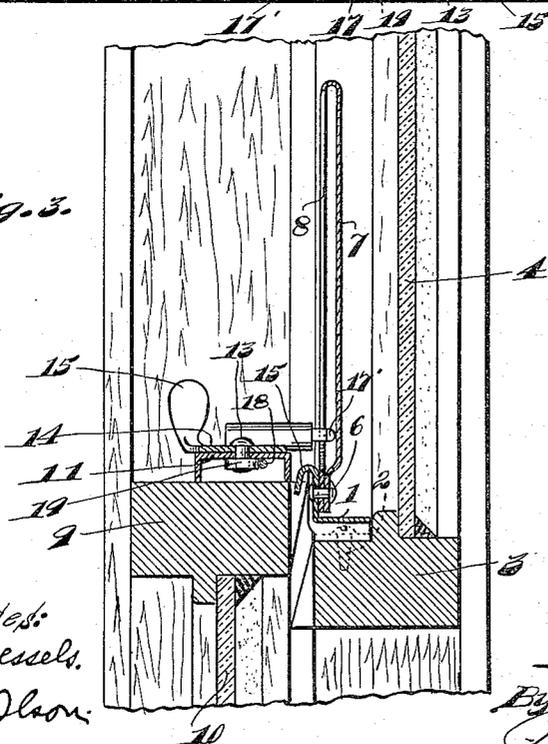


Fig. 3.



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UNITED STATES PATENT OFFICE.

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WINDOW-SASH LOCK.

1,155,084.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Application filed February 28, 1913, Serial No. 751,276. Renewed September 14, 1914. Serial No. 861,705.

To all whom it may concern:

Be it known that I, NILS G. NELSON, a citizen of the United States, and a resident of the city of Oak Park, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Window-Sash Locks, of which the following is a specification.

My invention relates to improvements in sash locks and has for its object the production of a device of this character which will be of improved construction and efficient in use.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which,

Figure 1 is a front elevation showing the central portion of the adjoining rails of the upper and lower sashes of a conventional window to which is applied a locking device embodying my invention, said device being adjusted to permit of limited relative movement of the sashes, Fig. 2 is an enlarged plan view partially in section of the construction shown in Fig. 1, the device being shown arranged to lock the sashes against any relative movement, and Fig. 3 is an enlarged central section of the construction shown in Fig. 1, with the sashes arranged in partially open position.

The preferred form of construction as illustrated in the drawing comprises a plate 1 which is secured by screws 2 to the upper rail 3 of the upper sash 4. Formed at the outer edge of the plate 1 is a hook member 5. Pivotaly secured at 6 to the hook member 5 is an elongated member 7. The member 7 is formed of a single strip of metal which is bent upon itself as shown, the respective ends of said strip being connected at the pivotal point 6. The two sides of the member 7 which are thus formed are spaced apart slightly and the front portion is provided with an elongated longitudinally extending slot 8.

Upon the upper side of the upper rail of the lower sash 10 of the window in conjunction with which the device is used, is arranged a plate 11 secured in position by screws 12. Pivotaly mounted at 13 upon

the upper side of the plate 11 is a plate 14 provided at one side with an upwardly turned ear 15 which constitutes a handle or finger piece for facilitating oscillation of said plate. Provided at one side of the periphery of plate 14 is an arcual upwardly turned flange 16 adapted, when the sashes are in closed positions, and upon proper rotation of the plate 14, to engage the hook 5 as clearly shown in Fig. 2 to absolutely lock the sashes together. The upper or engaging edge of the flange 16 is preferably inclined so as to be adapted to take up any wear or shrinkage of the sashes and insure a snug engagement of said flange with the hook member 5. Also carried by the plate 14 is a pin or projection 17 the outer end 17' of which is T-formed. The said projection 17 is so positioned that, upon rotation of the plate 14 in a clockwise direction from the position of said plate shown in Fig. 2, and with the member 7 also in the position shown in Fig. 2, the end 17' of the projection 17 will be moved into engagement with the slot 8 of said member 7 so that upon relative movement of either of the sashes, the member 7 will be rocked on its pivot toward vertical position effecting the engagement of the laterally projecting portions of the end 17' between the front and rear parts of said member 7, as clearly shown in Fig. 3. When the end 17' is thus positioned, the same coöperating with the member 7 will serve to lock the sashes together permitting of limited relative movement, that is movement corresponding substantially with the length of the slot 8. A leaf spring 18 having its respective ends secured in the base of the plate 11 coöperates with a substantially square head 19 provided at the lower end of the pivot pin 13 which is secured rigidly at its upper end to the plate 14, to yieldingly hold the latter in its positions of oscillatory adjustment.

With the construction set forth it will be seen that a device is provided wherein the sashes of the window may be either locked together absolutely against any relative movement or whereby the sashes may be locked together to permit of limited relative movement in order to afford ventilation. If it is desired to completely unlock the sashes the member 7 is rotated upon its pivot to a position extending to the right of said pivot instead of to the left as shown. When said

member 7 is thus positioned, upon oscillation of the plate 14 in a clockwise direction the flange 16 will be moved out of engagement with the hook 5 and the end 17' of the projection 17 will not engage the member 7 (the latter being arranged in an unengageable position) and so that in this arrangement the sashes will be completely unlocked.

A locking device of the construction set forth is durable and economical in construction, and will be found highly efficient in use.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a sash lock, the combination with the upper and lower sashes of a window, of an elongated member pivoted at one end to said upper sash, said elongated member consisting of two parallel portions united at their outer ends, one of said portions being provided with an elongated slot; an oscillatory member on said lower sash; and a projection on said member having a T-formed outer end adapted to engage said slot in said elongated member when the latter is in horizontal position, relative movement of said sashes, when said T-formed projection is in engagement with said elongated member, causing oscillation of said elongated member toward vertical position and interlocking of said projection with said elongated member, substantially as described.

2. In a sash lock, the combination with the upper and lower sashes of a window, of an elongated slotted member hinged at one

end to said upper sash; a hook member also on said upper sash adjacent the pivoted end of said elongated member; an oscillatory member on said lower sash; a projection on said oscillatory member having a T-formed outer end adapted to engage said slot in said elongated member, when said oscillatory member is moved to one position and when said elongated member is in horizontal position, relative movement of said sashes, when said T-formed projection is in engagement with said elongated member, causing oscillation of the latter toward vertical position in a plane substantially perpendicular to said projection and interlocking of said projection with said elongated member; and an engaging flange on said oscillatory member adapted, when the latter is turned to another position, to engage said hook member on said upper sash to lock said sashes against any relative movement, substantially as described.

3. In a sash lock, the combination with the upper and lower sashes of a window, of a plate mounted upon the meeting rail of the upper sash, a hook extending from said plate toward the meeting rail of the lower sash, an elongated slotted member pivoted at one end to said plate to swing in a plane parallel with the window panes, a lever arm secured to the lower sash, said lever arm being pivoted to swing in a horizontal plane, a flange upon said lever-arm adapted in one position of said lever-arm to engage beneath said hook to lock the sashes in closed position, and a projection of said lever arm having a head with which said slotted member slidably inter-locks in another position of said lever-arm.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NILS G. NELSON.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."