F. J. McCLASKEY.

WINDOW LOCK.

APPLICATION FILED SEPT. 10, 1909.

979,017. Patented Dec. 20, 1910.

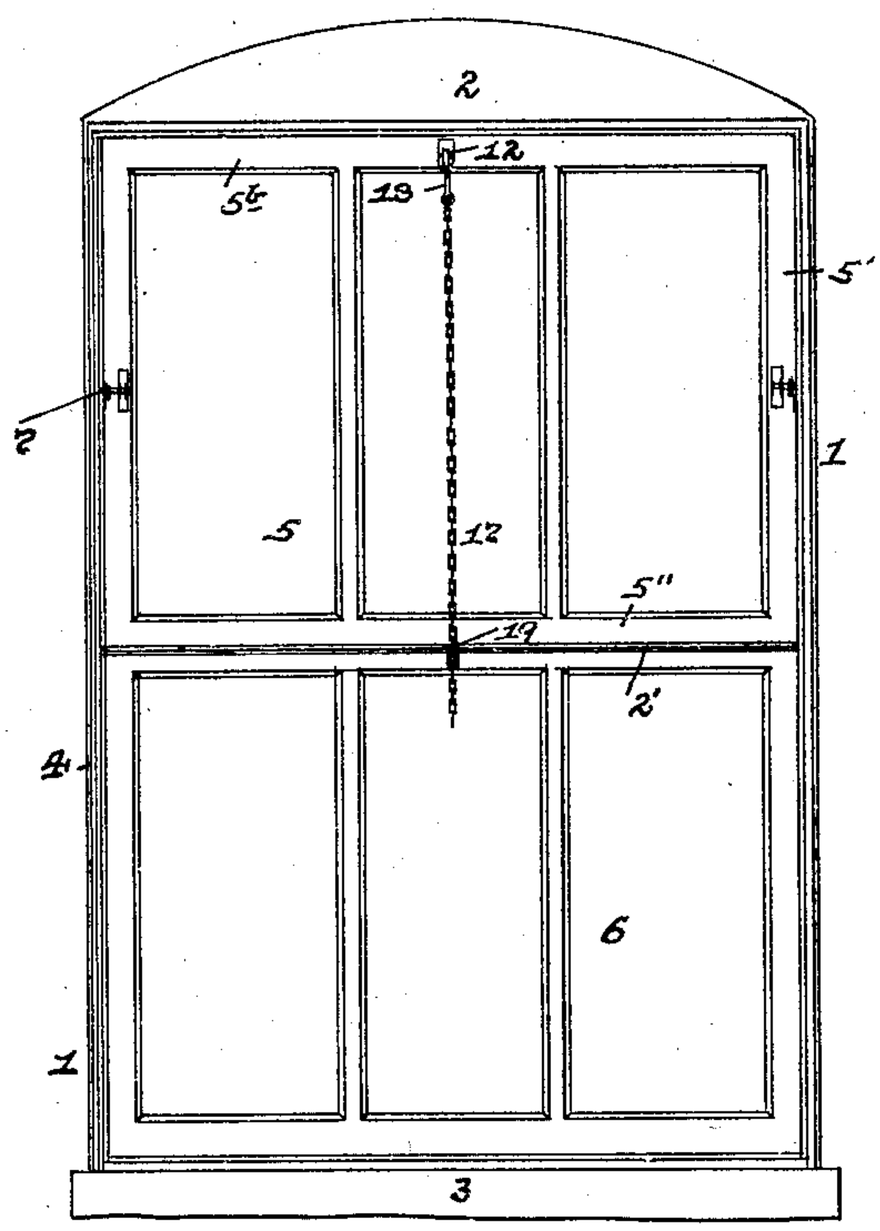

Fig. 1.

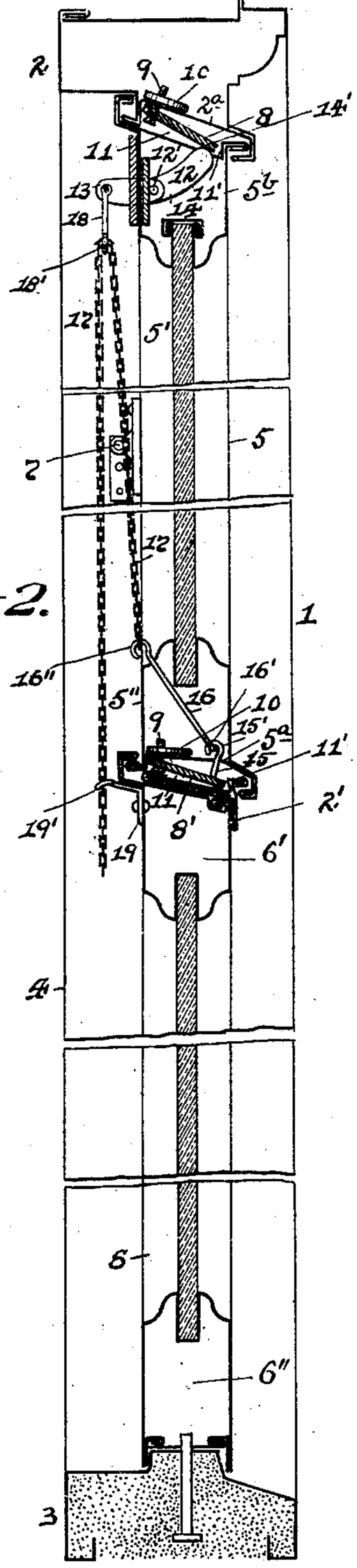

Fig. 2.

Fig. 3.

WITNESSES

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WINDOW-LOCK.

979,017. Specification of Letters Patent. **Patented Dec. 20, 1910.**

Application filed September 10, 1909. Serial No. 517,089.

To all whom it may concern:

Be it known that I, FRANKLIN J. McCLASKEY, a resident of Millvale borough, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Window-Locks; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to window locks, and has special reference to the locking of sashes in metallic fire-proof constructions.

The object of my invention is to provide a cheap, simple and efficient sash lock which can be easily and quickly operated, and one in which the operating parts of the same will not be exposed on the exterior of the frame or sash.

My invention consists, generally stated, in the novel arrangement, construction and combination of parts, as hereinafter more specifically set forth and described and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved sash lock, I will describe the same more fully, referring to the accompanying drawing, in which—

Figure 1 is an interior side view of a window frame and sash having my improved lock applied thereto. Fig. 2 is an enlarged vertical central section of the same. Fig. 3 is a like view showing another form of a frame embodying my invention applied thereto.

Like symbols of reference herein indicate like parts in each of the figures of the drawing.

As illustrated in Figs. 1 and 2 of the drawing, 1 represents the hollow window frame formed from sheet metal and having the head 2, meeting rail 2′ and sill 3 therein which are connected together by the jambs 4. Within the frame 1 are the hollow upper and lower sash 5 and 6 respectively, which are formed from sheet metal, and the upper sash is shown as being of the pivoted type by being pivoted at its side rails 5′ within the jambs 4 through the pivots 7 in the usual manner. Mounted upon the head 2 of the frame 1 and lower rail 5″ of the upper sash 5 are the swinging stop bars 8 and 8′, each of which extends across said head and rail and is hinged or pivoted at its inner end around a screw 9 passing loosely through each of said bars and through the bottom portions 2^a and 5^a of said head and rail, as well as through a washer 10 fitting against said portions and on the interior of said head and rail. The outer portion of the stop bars 8 and 8′ in their locked positions are each adapted to rest within a seat 11 formed in the upper faces of the top rail 5^b on the upper sash 5 and meeting rail 2′ between said sash and the lower sash 6 respectively, and such seats are inclined downwardly and outwardly and have an upwardly projection or lug 11′ formed by the wall portion at the outer ends of the said seats. When the word "frame" is used in the claims for holding the pin 9, it is understood that it also refers to the bottoms of the sash rails. A tilting or swinging lever 12 is pivoted centrally in the upper rail 5^b of the upper sash 5, as at 12′, and the inner end 13 of said lever extends through the inner face of said rail, while the outer end 14 of the same is located within said rail and is adapted to pass through a slot 14′ in the upper portion of 5^b of said sash, which forms the bottom of the seat 11 therein, and such end 14 engages with the outer end of the bar 8. A hooked bar 15 is screwed into the outer end of the bar 8′ and extends into the lower rail 5″ of the upper sash through the bottom 5^a on said rail while a hooked bar 16 by its hooked end 16′ is adapted to engage with the hook 15′ on said bar 15 and extends through the upper face on the inner side of the lower rail 5″ on the upper sash 5, where it is caught by one end of a chain 17 connected to a hook 16″ on such inner exposed end of the same. This chain 17 passes through a ring 18′ on the lower end of a bar 18, which is loosely hung at its upper end on the inner end 13 of the lever 12, while the other end of such chain extends down from said hook so as to be within easy reach of the operator, and if desired, such chain can be caught between the bifurcated arms 19′ of a hook 19 extending out from the inner face of the uppper rail 6′ on the lower sash 6, which will act to hold such chain in position to hold the sash 5′ in its opened position and prevent the swaying, swinging or undue closing of the same.

In the operation of my improved window lock, the sash 5 is in its locked position in the frame 1, as shown in Figs. 1 and 2, and when it is desired to unlock such sash, the

operator releases the chain 17 from between the arms 19′ on the hook 19 and pulls down upon the same, which will act to pull down the inner end 13 on the pivoted lever 12 and raise the outer end of the same through such chain being connected to the bar 18 loosely connected to said end 13 by such chain passing through the ring 18′ on said bar. While such chain 17 is thus passing through the ring 18′ on the bar 18 the portion of such chain between such ring and the hooked bar 16 is raised, while the other portion of the same in the hands of the operator is being lowered, so that the end 14 on the lever 12 in thus being raised will act to raise the outer end of the bar 8 on its pivot screws 9, and the bar 16 being also raised through the rail 5″ by the portion of the chain 17 connected thereto will also act to raise the outer end of the bar 8′ on its pivot screws 9 by reason of such bar 16 being connected to the hooked bar 15 on said outer end. As the bars 8 and 8′ are thus raised within the seats 11 in the top rail 5ᵇ of the upper sash 5 and in the meeting rail 2′ between said sash and the lower sash 6, the outer ends of said bars will be held above and free from the projections 11′ on said rails and at the outer ends of said seats, so that said upper sash can then be opened by being tilted or swung in the frame 1 on the pivots 7, and when such sash is in its open position, the bars 8 and 8′ are held in position to be raised by the sash in closing by the inner ends of said bars engaging with the bottom faces 2ᵃ and 5ᵇ on the head 2 and said sash or by the inner wall of the holes in said bars engaging with the pins 9, so that either such faces or the pins engaging with the holes in the bars will thereby form a holding means which will hold said bars within said head and sash and thereby limit the downward movement of the same. When it is desired to return the upper sash 5 to its closed and locked position in the frame 1, the operator releases the hold upon the chain 17, which will raise the end 13 on the lever 12 and lower the end 14 thereon, and after such releasing the sash 5 can then be swung to its vertical position within the frame 1 on its pivots 7. In assuming such position the projections 11′ on the sashes 5 and meeting rail 2′ will raise the outer ends of the bars 8 and 8′, so that when the sash 5 reaches its closed vertical position such ends will drop down by gravity in their seats 11 and behind said projections to lock the sash 5 in such position.

If desired, the lower sash 6 can be also swung in the frame 1 with upper swinging sash and can be locked within the stationary sill 3 of said frame, and within the meeting rail 2′ such as is shown in Fig. 3, in which case the seat 11 and projection 11′ for the lower sash are located in the upper rail 6′ of said sash and the upper swinging bar 8 for such sash is mounted on the meeting rail 2′ and below the seat 11 for the lower swinging bar 8′ for the upper sash 5. In this case the lower seat 11 for the sash 6 is formed in the upper face of the sill 3 and a pin 20 held within the sill projects into said seat to be engaged by the outer end of the lower stop bar 8′ on the lower rail 6″ of said sash. The bars 8 and 8′ for locking the lower sash are operated in the same manner as the bars 8 and 8′ for the upper sash 5 and through another chain 17′ connected to said first named bars and through the means heretofore described for said last named bars, such as to the bars 15 and 16 on the lower bar 8′ on the sash 6 and the tilting lever 12 on the upper rail 6′ of said sash.

If desired, a single sash can be located in the frame 1 and be swung therein by a locking means being located at the lower end of said sash for engagement with the sill and another locking means located in the head for engagement with the upper part of said sash, so that these two locking means can be connected by a chain and operated as before described.

Various other modifications and changes in the manner of operating and applying my improved window lock, design and location of its operating parts, and other changes in the same, may be resorted to, without departing from the spirit of the invention or sacrificing any of its advantages.

It will thus be seen that my improved window lock can be applied to swinging sashes or transoms of the pivoted, casement or hinged type, and various other forms of such devices, and can be operated without interfering with any of the parts of the frame or sash. It will not be liable to get out of order or be subject to breakage and will not be exposed to the weather or to the eye. The device can be easily and conveniently applied to the frame or sash and when used on fire-proof constructions it will be completely inclosed within the frame and sash.

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

1. The combination of a window frame having a swinging sash therein, a gravity bar on one of said members adapted to engage with a projection on the other of said members to lock the sash in its closed position in said frame, a headed pin extending downward from the frame for holding said bar, and the inner end of said bar adapted to engage with said holding means to limit the downward movement of said bar in the open position of said sash.

2. The combination with a window frame having a swinging sash therein, a gravity

swinging stop bar on one of said members adapted to engage with a projection on the other of said members to lock the same in its closed position in said frame, a headed pin extending downward from the frame for holding said bar, and the inner end of said bar adapted to engage with said holding means to limit the downward movement of said bar in the open position of said sash.

3. The combination with a window frame having a swinging sash therein, a movable stop bar on one of said members adapted to be moved into a seat in the other one of said members and engage with a projection therein to lock said sash in its closed position in said frame, a headed pin extending downward from the frame for holding said bar, and the inner end of said bar adapted to engage with said holding means to limit the downward movement of said bar in the open position of said sash.

In testimony whereof, I the said FRANKLIN J. MCCLASKEY have hereunto set my hand.

FRANKLIN J. McCLASKEY.

Witnesses:

JAMES L. WEHN,

J. N. COOKE.