

D. M. BARR.

SASH LOCK.

APPLICATION FILED OCT. 1, 1908.

982,783.

Patented Jan. 31, 1911.

FIG. I.

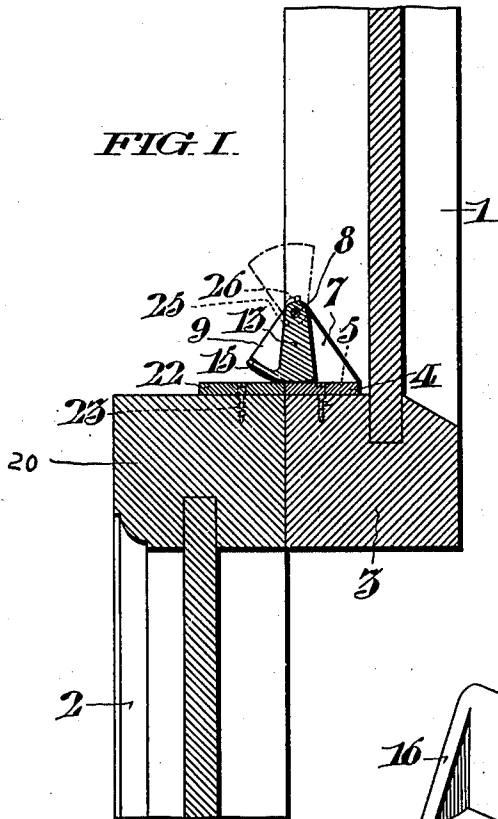


FIG. III.

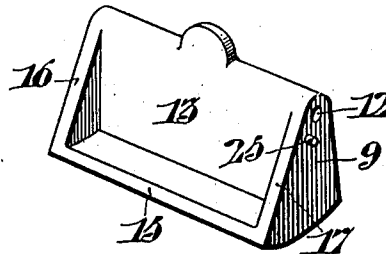
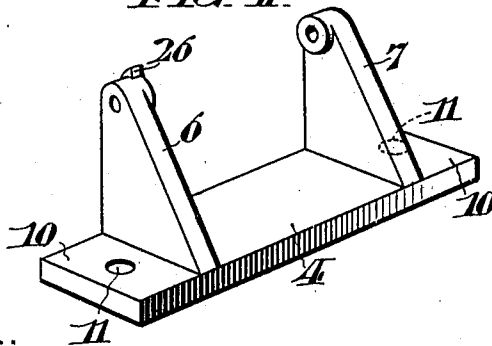


FIG. II.



WITNESSES:

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DANIEL M. BARR, OF PHILADELPHIA, PENNSYLVANIA.

SASH-LOCK.

982,783.

Specification of Letters Patent.

Patented Jan. 31, 1911.

Application filed October 1, 1908. Serial No. 455,713.

To all whom it may concern:

Be it known that I, DANIEL M. BARR, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sash-Locks, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in sash locks and has for its object the production of a gravity lock which shall be automatic in operation, simple and durable in construction, and free from the unreliability of spring action.

The sash lock constructed according to my invention, comprises an overweighted swing catch which is normally maintained by gravity in the path of travel of a sash or similar closure thereby forming an abutment to prevent its movement in one direction, yet capable of being swung to an inverted position, and there maintained by gravity, in such position as to permit the travel of the sash in the opposite direction which when so moved readjusts the overweighted catch so as to again become effective when the sash is moved to its closed position.

In the accompanying drawings, Figure I, is a vertical section through the upper and lower sashes of a window in closed position, conveniently illustrating my invention as applied thereto. Fig. II, is a perspective view of the frame or supporting member of the lock. Fig. III, is a perspective view of the swinging member or bolt.

In said figures, 1, and 2, designate the upper and lower sashes respectively of an ordinary window. To the upper face of the bottom rail 3, of the upper sash 1, is fastened the plate 4, by means of screws 5, said plate carrying the lugs 6, and 7, which are integral therewith and support the pin 8, upon which the swinging bolt 9, is pivoted. Plate 4, is extended beyond each of the lugs 6, and 7, as indicated at 10, 10, these extremities being pierced by holes 11, for the insertion of screws 5, by which the said plate 4, is secured to the sash rail.

The bolt 9, is in form a sectional prism hollow in one side, and is longitudinally pierced at its upper end by a hole 12, which receives the pin 8. In cross section said bolt 9, comprises a heavy vertical arm 13, overweighted sufficiently to cause the pro-

jection of its lateral curved arm 15, beyond the inner face of the bottom rail 3, of the upper sash, to overhang the upper rail 20, of the lower sash when in closed position as clearly shown in Fig. I. Said rail 20, of the lower sash 2, is faced at its top by a metallic plate 22, fastened by screws 23, and which is adapted to engage with the swinging bolt 9, when the sashes are locked.

To open the window, the bolt 9, is depressed and swung to the dotted position shown in Fig. I, where it will be seen that the center of gravity of the said bolt is to the left of the vertical, thus causing the pin 25, to engage its stop 26, on the bearing bracket 6. When in this last position, it will also be observed that the back of the bolt now serves as a cam face which projects into the path of the sash 2, whose upper rail 20, upon being raised encounters the said cam surface and shifts the bolt until its center of gravity is to the right of the vertical, whereupon, the bolt again drops to its original position after the rail 20, has passed it.

During the lowering of the sash 2, the under face of its upper rail 20, encounters the projecting inclined sides 16, and 17, of the bolt 9, which is thereby depressed, and when the sash has finally been closed, again swings forward under the influence of gravity and projects above the plate 22, on the rail 20, of the said sash, thereby automatically locking the latter.

By the arrangement of the parts just described it is impossible to open the window from the outside, and on account of their simplicity there is absolutely no possibility of their derangement to prevent automatic locking.

Having thus described my invention, I claim:—

1. A sash lock comprising a swinging catch mounted in proximity to the meeting rail of a sash and overweighted sufficiently to normally cause it to form an abutment for locking said sash against movement in one direction, means for pivotally supporting said catch, in combination with means adapted to co-act with gravity to maintain the said catch in inverted position during the initial opening of the said sash, the opening of the sash operating to return said catch to normal locking position, whereby when the sash is lowered, it will be automatically locked.

2. A sash lock, comprising an over-
weighted pivoted catch normally projecting
under the influence of gravity to form an
abutment for locking a sash against move-
5 ment in one direction; means adapted to co-
act with gravity to maintain said catch in
inverted position during the initial opening
of the sash; and means carried by said sash
adapted to engage the catch as the window
10 is opened to destroy its stability, when in
inverted position and thereby permit gravity

to readjust said catch in readiness to lock
the sash automatically upon its closing.

In testimony whereof, I have hereunto
signed my name, at Philadelphia, Pennsyl- 15
vania, this twenty-ninth day of September
1908.

DANIEL M. BARR.

Witnesses:

JAMES H. BELL,
E. L. FULLERTON.