(No Model.)

G. H. AYLWORTH.

SASH FASTENER.

No. 376,359. Patented Jan. 10, 1888.

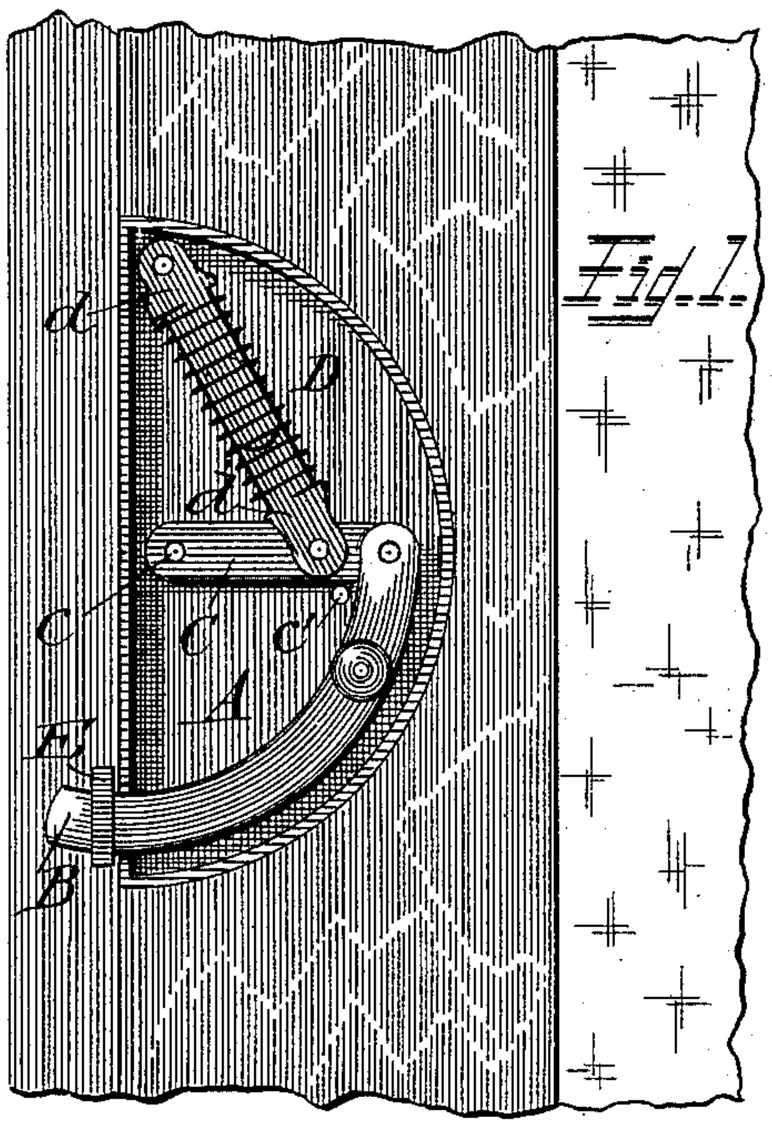

Fig. 1.

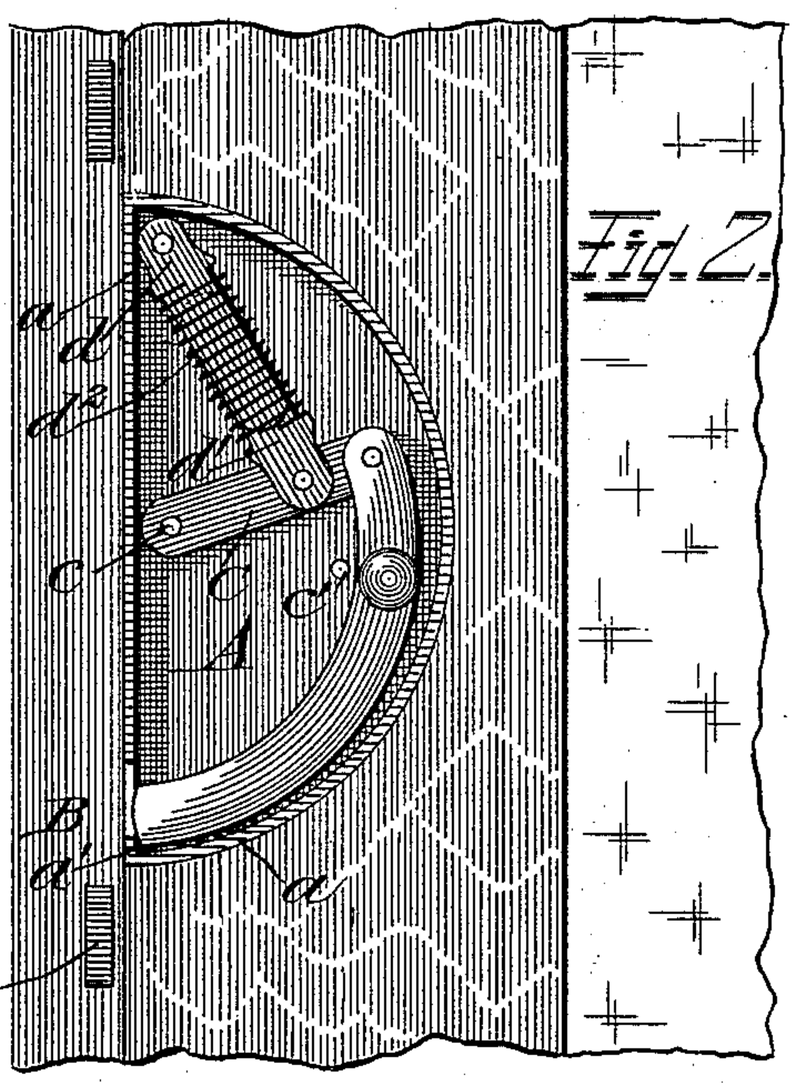

Fig. 2.

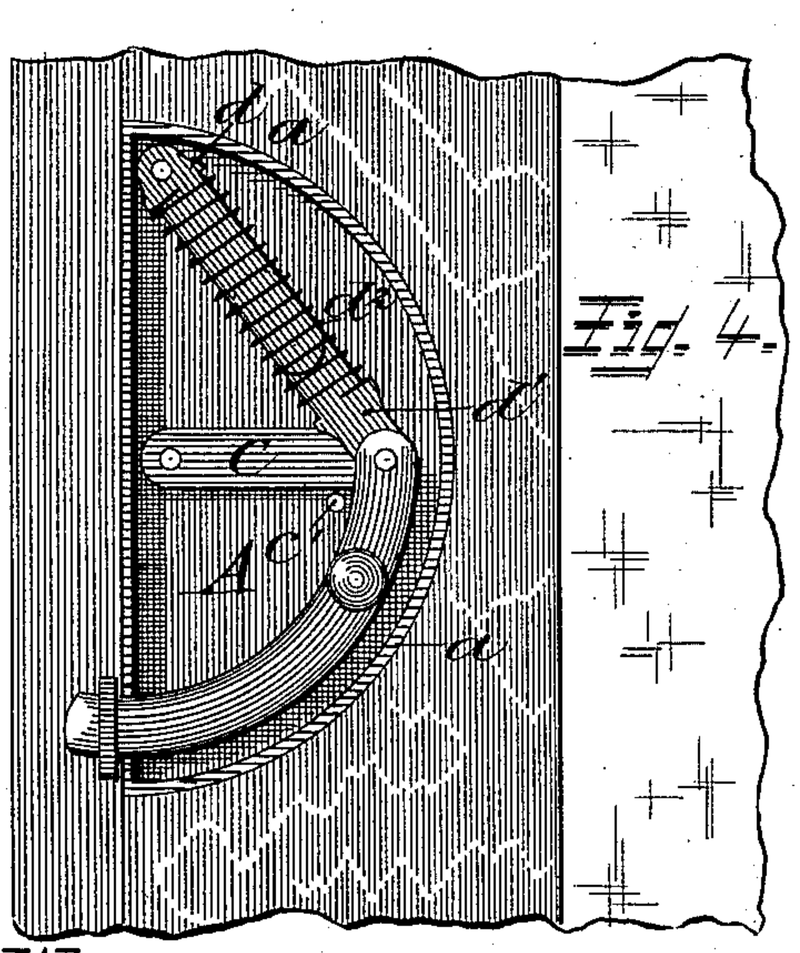

Fig. 4.

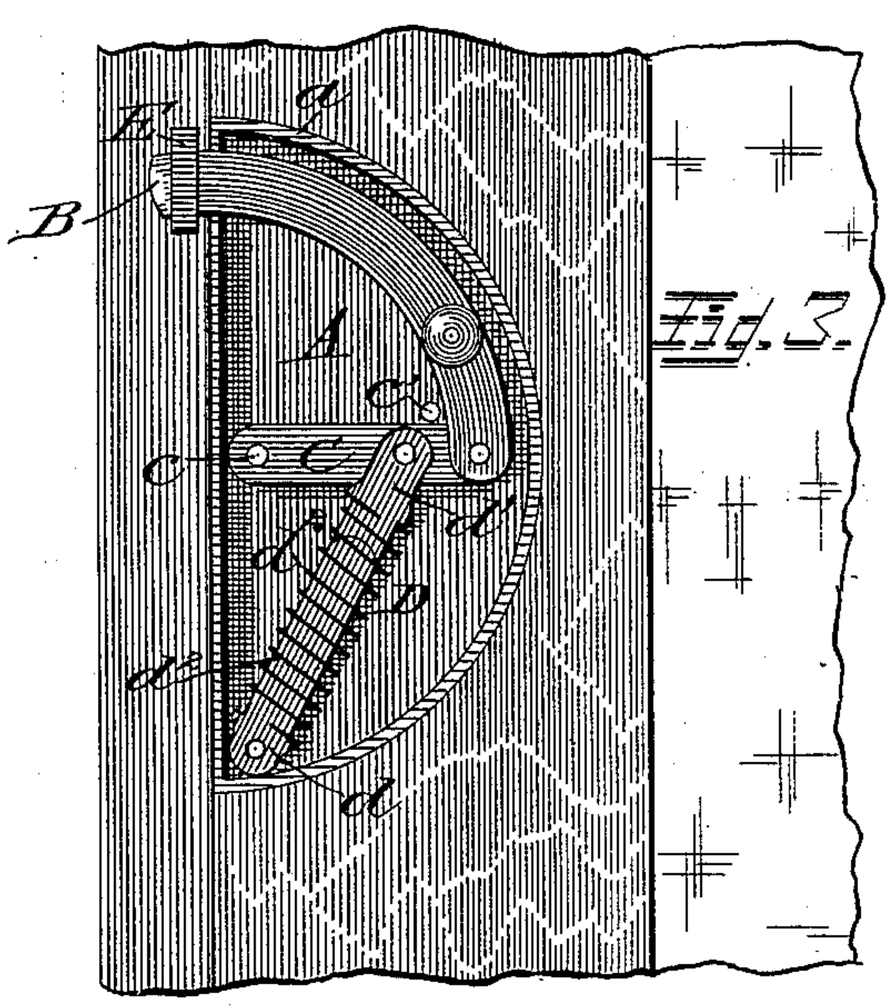

Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE H. AYLWORTH, OF BRIGHTON, ILLINOIS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 376,359, dated January 10, 1888.

Application filed November 12, 1887. Serial No. 254,996. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. AYLWORTH, a citizen of the United States, residing at Brighton, in the county of Macoupin and State of Illinois, have invented certain new and useful Improvements in Sash-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to devices for locking sliding window-sashes or doors either in open or closed position; and it comprises a spring-pressed curved bolt linked to a base-plate and adapted to move in a circular direction, its front end adapted to be thrown out of the line of movement into engagement with a stop, by which it is held in retracted and inoperative position.

In the accompanying drawings, which illustrate my invention and form a part of this specification, the several figures represent sections of the side rails of window-sashes with my lock applied thereto, and also a portion of the frame.

Figures 1 and 2 show the parts, respectively, in locked and unlocked position. Fig. 3 represents an inverted lock in which the bolt works upward, and Fig. 4 illustrates a modified construction.

A designates a base-plate, which is preferably semicircular in shape, and has a surrounding upturned flange, *a*, the whole forming a shallow open case, which receives the lock mechanism.

B designates the bolt, which is curved to correspond with the circular contour of the case. It is provided with a knob or button, which serves as a handle by which to retract it and to throw it into and out of engagement with the stop which holds it in retracted position. The flange *a* is cut away to form a passage for the bolt. This passage is formed a short distance from the corner, and that part of the flange (marked *a'* in Fig. 2) between the passage and the corner forms the stop for the bolt.

C designates a link, one end of which is pivoted to the case at *c* and the other jointed to the end of bolt B.

D is a push-bar, which is made in two parts, *d d'*, the first pivoted to the case A and the other pivoted or jointed to the link C between its pivot *c* and the bolt B. The two parts *d d'* overlap each other, and when the bolt is retracted one part slides upon the other. These two parts thus connected and arranged are surrounded by a helical spring, d^2, the ends of which bear against shoulders near the pivotal ends, the tendency of the spring being to press the two parts apart and extend the push-bar, whereby the bolt is thrown forward.

E is the keeper with which the end of bolt engages to lock the sash. The keeper is fastened to the window-frame, and as many may be used as are desirable or necessary in order to lock the sash at the various points at which it may be desirable to secure it at different times. In ordinary cases the keeper may be simply a mortise in the frame or bead.

I prefer to have the bolt work downward, as shown in Figs. 1, 2, and 4, for the reason that if the spring should break or the parts become disconnected gravity would retain it in locked position, whereas it will unlock by gravity in the event of such breakage or disconnection when the bolt works upward, as in Fig. 3. This preference is merely on account of the contingencies mentioned. So long as the parts remain intact the arrangement illustrated in Fig. 3 is as efficient and reliable as those in Figs. 1, 2, and 4.

In Figs. 1, 2, and 3 I show the push-bar D connected to the link C, as above described. Fig. 4 shows a modification, in which the push-bar is connected directly to the bolt by the same pivot that connects the latter to the link C.

c' is a stop which projects from the base A to arrest the forward movement of the link C, and thereby limit the throw of the bolt.

While I have shown and described the lock only as applied to the side rail of a sash, it is evident that it may be applied to the meeting-rails for the purpose of locking both sashes, and I desire to have this understood as one of the uses to which my lock is adapted, although the same is not illustrated in the drawings.

I desire also to state that instead of using the flange of the case as a stop or detent for the bolt to hold the latter in retracted position I may provide a separate stop within the case.

Having thus described my invention, I claim as new—

1. A sash-lock having a curved, circularly-

movable, spring-pressed bolt adapted to be thrown out of the line of movement at one end into engagement with a stop for holding it in retracted and inoperative position, substantially as shown and described.

2. In a sash-lock of the character described, the combination of a base-plate or case, a curved, circularly-movable, spring-pressed bolt, a link-connection between the base-plate and the inner end of the bolt, and a stop with which the outer end of the bolt is adapted to engage to hold the same in retracted and inoperative position, substantially as shown and described.

3. In a sash-lock, the combination of a movable locking-bolt, an extensible push-bar connected therewith, and a spring for extending said bar, substantially as shown and described.

4. In a sash-lock of the character described, the combination of a semicircular flanged base-plate or open case, A, of a curved, circularly-movable bolt, B, a link pivoted at one end to the case and at the other jointed to the inner end of the bolt, an extensible push-bar, D, between the case and bolt, a spring, d^2, to extend said push-bar, and a stop, c', to limit the throw of the bolt, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. AYLWORTH.

Witnesses:

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