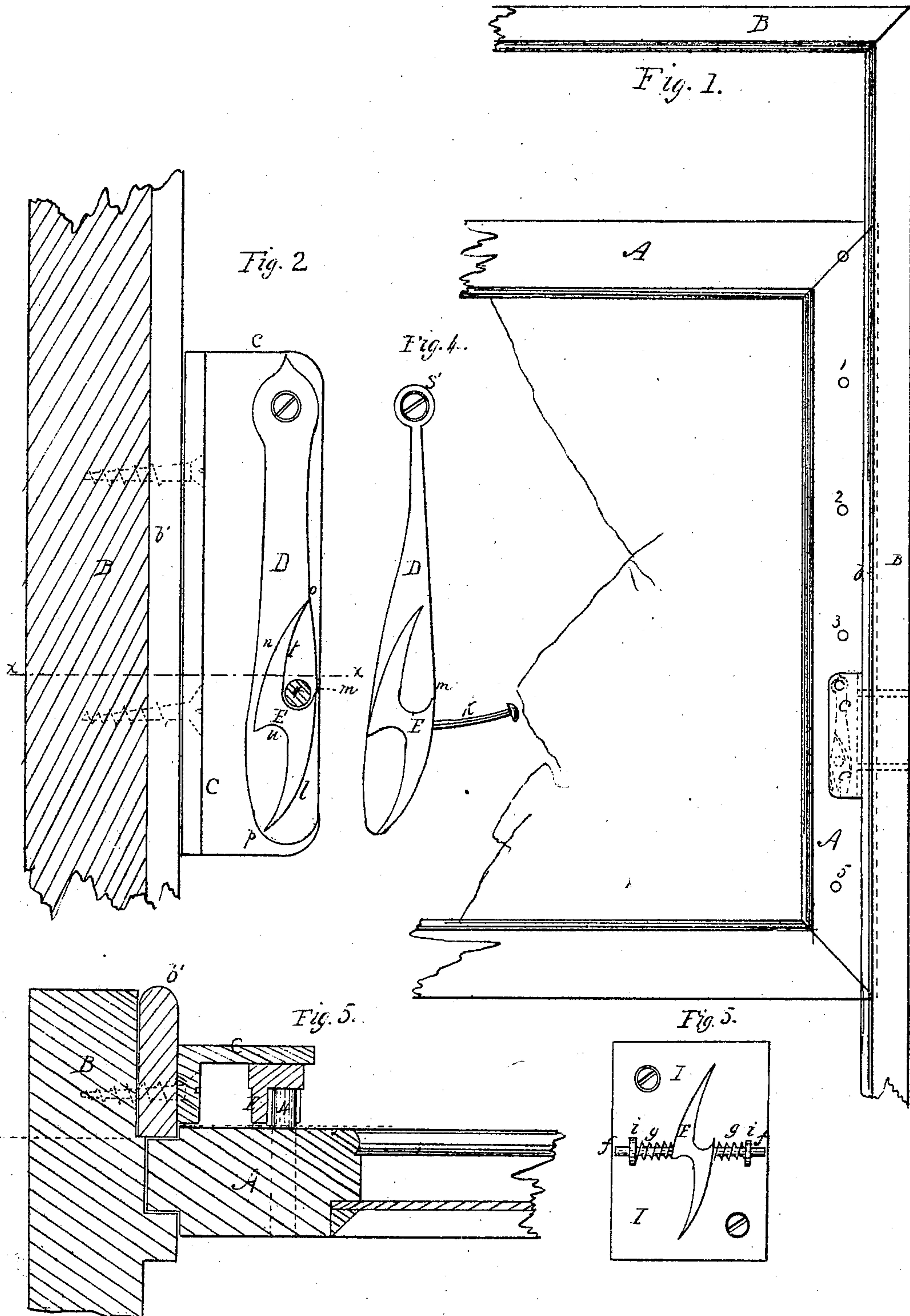


*J. N. McIntire.*  
*Sash-Stopper.*

*Nº 72313*

*Patented Dec. 17, 1867*



*Witnesses:*  
*Charles Cheer*  
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# United States Patent Office.

J. N. McINTIRE, OF NEW YORK, N. Y.

*Letters Patent No. 72,313, dated December 17, 1867; antedated December 5, 1867.*

## IMPROVED SASH-STOPPER.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. N. McINTIRE, of New York, of county of New York, in the State of New York, have invented certain new and useful Improvements in Sash-Stoppers or Catches; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to a novel device or means for holding the sash of windows up or open, and locking them down, and has for its object to provide for this purpose a device or mechanism which shall be automatic in its operation, that is to say, which shall operate to catch and release the sash by the motions of the sash alone, and which shall be exceedingly simple and economic of manufacture. And to these ends my invention consists in a sash-stopper or catch, composed of a cam-like hook, arranged to vibrate or move laterally, and receive, hold, and release the supporting-pins, as will be hereinafter fully explained.

To enable those skilled in the art to make and use my invention, I will proceed to describe it more particularly, referring by letters to the accompanying drawings, in which—

Figure 1 is an elevation of a portion of a window-frame and sash with one of my new sash-stoppers attached thereto.

Figure 2 is an elevation of the same, showing the inner side of the apparatus, (full size,) and

Figure 3 is a section at the line *x x*, fig. 2.

Figure 4 is an elevation showing a modification of my invention, and

Figure 5 is an elevation showing still another modification of the same invention.

At fig. 1, A is the sash, and B the window-frame; C is the catch or stopper-device, and 1, 2, 3, 4, &c., the pins, in conjunction with which the stopper or catching-device operates to hold up the sash. In fig. 1, the parts are reduced to a small scale, in order to show the whole length of the sash, and the position on the sash and frame of the holding-device or stopper. In figs. 2 and 3, I have shown the parts nearly or about the full size; and from these figures it will be seen more clearly that the stopper or catch-device is composed of two pieces, viz, an angle-plate, C, the shorter or narrower side of which is *x*, screwed to the bead-strip, *b*, of the window-frame; and a pendant, D, which is pivoted at S to the wider side of said angle-plate C. The pendant D is cast or formed with a peculiarly-shaped projecting portion, E, which stands out from the flat surface of the pendant a distance about equal to the distance of the pins 1, 2, 3, &c., projecting from the face of the sash A, (see fig. 3.) The sash is represented as being supported by reason of one of its pins, 4, resting in the hook-portion E of the stopper.

Now, to explain the operation of the apparatus, let us suppose it is desired to raise the sash higher, and lock it up. To accomplish this, it is only necessary to lift the sash until the pin 4 rides past the inclined surface *t* (see fig. 2) of the hook, (swinging the pendant one side as it passes,) and the next pin, 5, coming up, strikes against the inclined surface *l* of the hook, swings the pendant again to one side until said pin 5 has passed the point *m*, when the pendant swings back by its own gravity to a vertical position, and the pin 5 will then, if the sash be let go of, take a bearing in the hook in the same position as pin No. 4 is shown in; and so on, the sash may be raised up and held on each pin successively, if desired. When it is desired to let the sash down, it is only necessary to lift it until the pin which happens to be sustaining it (no matter which pin it may be) passes over the surface *t*, and passes the point *o* of the hook E, when it will pass down along the inclined surface *w*, (swinging the pendant and its hook E out of the way as it passes,) as will each and all of the pins which happen to be over the hook until the sash comes to its seat on the window-sill. When the sash is clear down, the lower portion *n* of the hook will swing over the upper or top pin of the series, and effectually lock the sash down. When it is desired to lower the sash from one pin to another, it is simply lifted until the pin on which it is sustained passes over the surface *t*, and above the point *o*, when the sash can descend, and is allowed to descend until the pin on which it is proposed to stop it passes below the point *p*, (see fig. 2;) the sash is then raised slightly, until the last-mentioned pin passes above the point *m*.

Thus it will be seen the sash may be raised and lowered from one pin to another, and supported on any particular pin, (to have the window more or less open,) without handling or touching the apparatus at all, which is worked automatically as the sash is lifted and lowered, as explained. In lieu of having the pendant D hung on



a plate, C, and the pins 1 2 3 put in the face or front of the sash, the pendant may be hung in the edge of the sash, and the pins placed in the surface of the frame, against which the edge of the sash runs. In this application of the stopper, the angle-plate C is dispensed with, (the screw S passing right into the edge of the sash,) but the sash has to be grooved out longitudinally, to allow a passage for the pins, and must also be cut away, to allow the pendant to swing. When the pendant is hung in the edge of the sash, as just explained, it should be provided with a projecting pin or arm, *k*, (as seen at fig. 4,) which will protrude through the face of the sash, and by means of which it can be swung, or vibrate to release the top pin when the sash is locked down.

So far I have explained the stopper as constructed and applied to the lower sash of a window. It will be seen that the pendant can be applied equally as well to the upper sash, in which case, however, there will be no need of more than the lower hook-portion *n*.

At fig. 4, I have represented the hook-piece or portion E as formed on or attached permanently to a pendant, D, which, in lieu of being free to swing or vibrate on its S', is supposed to be rigidly secured at its upper end by the screw S'' to the plate C, but which is made of a suitable shape and material to constitute a spring, so that it can spring or yield to one side or the other, to allow the passage of the pins, 1, 2, 3, &c., past the hook E, and always return or spring back to its normal vertical position. At fig. 5, I have illustrated still another modification of my invention, in which the hook E is provided with rods *ff*, which pass through projecting lugs or ears *ii* on a plate, I, and around which are arranged spiral springs *gg* in such manner as to hold the hook E in the proper position to catch on the pins, and at the same time allow it to be sprung or pressed one way or the other, to admit the passage by it of said pins. In this modification of my invention, the plate I may be screwed on to the edge of the sash, (let in so that the top of E comes flush with the surface,) as in the application of the pendant, or it may be formed with an angle, as applied just as the angle-plate C is put on to the bead-strip.

It may be readily understood that there are a great variety of modifications to which my invention is subject, and that it may be carried out and applied in a great variety of ways, the gist of the invention consisting in the idea of the yielding cam-like catch and pins, so arranged that the rigid pins or sustaining-points can be made to rest on the said cam or hook, while at the same time the latter can be deflected around the pins to allow them to pass by, as already explained. Of course the hook E and its pendant or other attachment may be placed in the frame or in the sash, as may be deemed expedient. And in lieu of the spring-arm D' being placed as shown, it may be inverted, though it is best to have it placed as shown.

Having explained my new sash-stopper, what I claim therein as new, and desire to secure by Letters Patent, is—

The catch or cam-like hook, so constructed and arranged as to interlock with and disengage from suitable pins or projecting stops in substantially the manner described, for the purposes set forth.

In testimony whereof, I have hereunto set my hand and seal, this 30th day of April, 1867.

J. N. McINTIRE. [L. s.]

Witnesses:

CHARLES SPEER,

A. DE LACY.