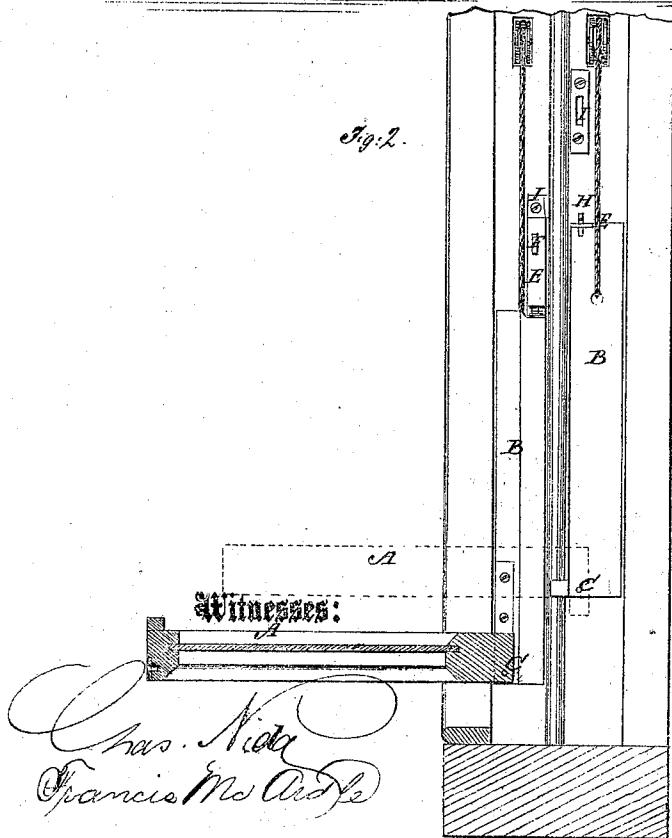
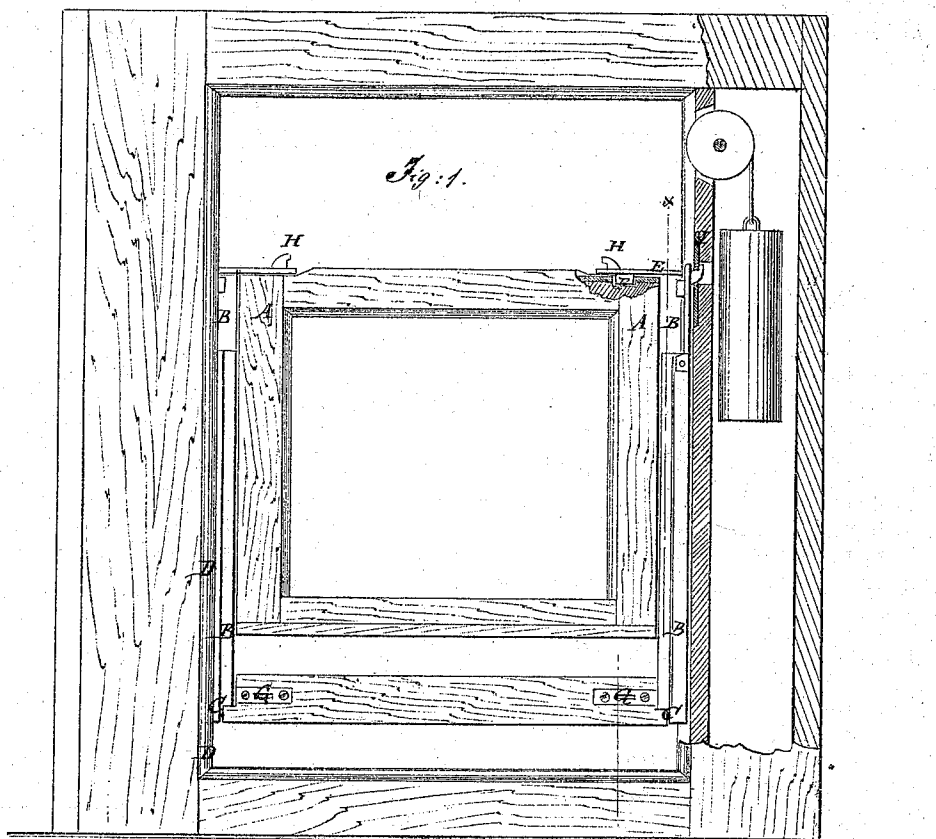


J. GROVES.
Improvement in Window Sash.
No. 120,267. Patented Oct. 24, 1871:



Witnesses:
Chas. Nida
Francis M. Auld

Inventor:
J. Groves
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Attorneys.

UNITED STATES PATENT OFFICE.

JOHN GROVES, OF NEW YORK, N. Y.

IMPROVEMENT IN WINDOW-SASHES.

Specification forming part of Letters Patent No. 120,267, dated October 24, 1871.

To all whom it may concern:

Be it known that I, JOHN GROVES, of the city, county, and State of New York, have invented a new and useful Improvement in Window-Sash Fastenings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The invention relates to that particular class of window-sashes that is hinged at the bottom to a movable stile, and locked thereto and to the frame-work at some point above. It consists in a double and reversible catch, which locks the sash to the stile and the stile to the frame.

Figure 1 of drawing is a front view, partly in section, of a sash with my improved fastening. Fig. 2 is a vertical section of the same.

A is the window-sash; B B, the stiles; and K, the stile-frame. The sash A is pivoted, at the

points C C, to the stile B in the usual way, and fitted snugly therein against a suitable flange or stop. E is my improved catch-bar, having studs F respectively on each side of its free end and pivoted to stile B. G are slotted plates on the top of sash, and I slotted plates on the stile-frame, which receive the studs of the catch-bar.

By this construction it will be perceived that one double-studded and reversible catch on each side of the sash does all the locking.

Having thus described all that is necessary to a full understanding of my invention, what I esteem to be new is—

The double-studded and reversible catch E F H pivoted to the stile B, and operating to lock the sash to the stile and the stile to the frame, as set forth.

JOHN GROVES.

Witnesses:

GEO. W. MABEE,
T. B. MOSHER.

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