I. N. WOOD & A. MORTON.
Sash-Fastener.

No. 200,236. Patented Feb. 12, 1878.

Fig. 1

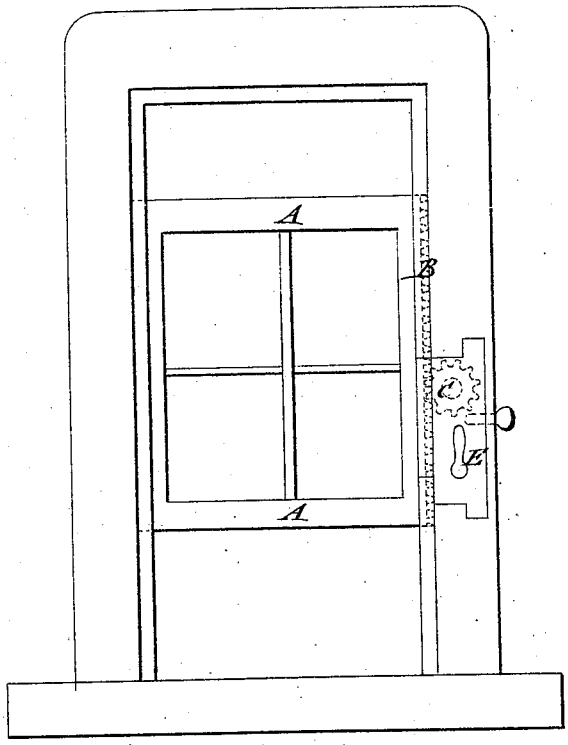


Fig. 2

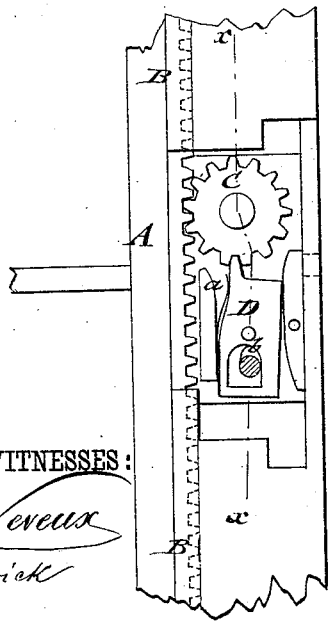
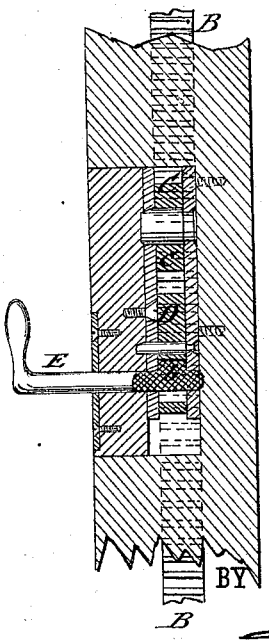


Fig. 3



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ISAAC N. WOOD AND ALEXANDER MORTON, OF WILMINGTON, DELAWARE.

IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. **200,236**, dated February 12, 1878; application filed December 19, 1877.

To all whom it may concern:

Be it known that we, ISAAC N. WOOD and ALEXANDER MORTON, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and Improved Sash Fastener and Lock, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a front view of a window with our improved sash fastener and lock; Fig. 2, a front view of the sash fastener and lock with the covering face-plate detached to show interior construction; and Fig. 3 is a vertical transverse section of the same on line *x x* of Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention has reference to an improved sash fastener and lock combined, which is more especially designed for use in car-windows, but which may also be used with advantage for windows generally, as it secures the sash at any height, and locks it in open or closed position in reliable manner.

The invention consists of a sash having a rack at one side, in connection with an intermeshing pinion that is either locked, engaged, or cleared by a fulcrumed spring-pawl, actuated by a cam-lever or equivalent means, all as hereinafter more fully described and claimed.

By reference to the drawings, A represents a sash to which our improved fastener and lock is applied. The sash is provided at one side with a rack, B, that meshes with a pinion, C, turning on a fixed pin of a recess of the window-casing. A pawl, D, is fulcrumed below the pinion, and acted upon by a spring, *a*, at one side, so as to engage the teeth of the pinion. The lower part of the pawl D is recessed and actuated by the cam *b* of a shaft, which, when turned by an outer handle, E, to the left, locks the pawl, and thereby the pinion and sash, while, when the cam is turned into vertical position, the pawl clears the pinion when the same is turned in opposite direction. By turning the cam to the right the pawl clears the pinion, and admits thereby the revolving of the same, without obstruction, in either direction. In one case the sash may be positively locked, so as to prevent its being raised or lowered; in the second case the sash may be raised but not lowered, being retained at the point to which it has been raised, while in the third case it may be raised or lowered, as desired.

The setting of the pawl into the three positions just described may also be accomplished by a slide-piece acting upon the lower middle or upper part of the pawl, or by other equivalent means. The sash can thus be raised or lowered, according as the pawl is set to engage or clear the pinion, and may then be locked, so as to be rigidly held in position, by throwing the pawl sidewise, which prevents the turning of the pinion in either direction.

The operating mechanism is inclosed by a face-plate that is attached in suitable manner. A very reliable and conveniently-operated sash lock and fastener is thus obtained.

We are aware that it is not new to use a pinion to engage with a rack on the edge of sash, together with a pivoted stop-bar, a finger resting against it, a hooked thumb-lever, and a connecting-link; also, that it is not new to use a rack, pinion, and gravitating-pawl—the former applied to the sash, and the latter arranged within casing.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with rack and pinion, of the pawl D and cam *b*, the latter working in recess of pawl and on a shaft having outer handle, as shown and described.

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Witnesses:
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