H. C. BURK.

Window-Sashes.

No. 147,041. Patented Feb. 3, 1874.

Fig. 1

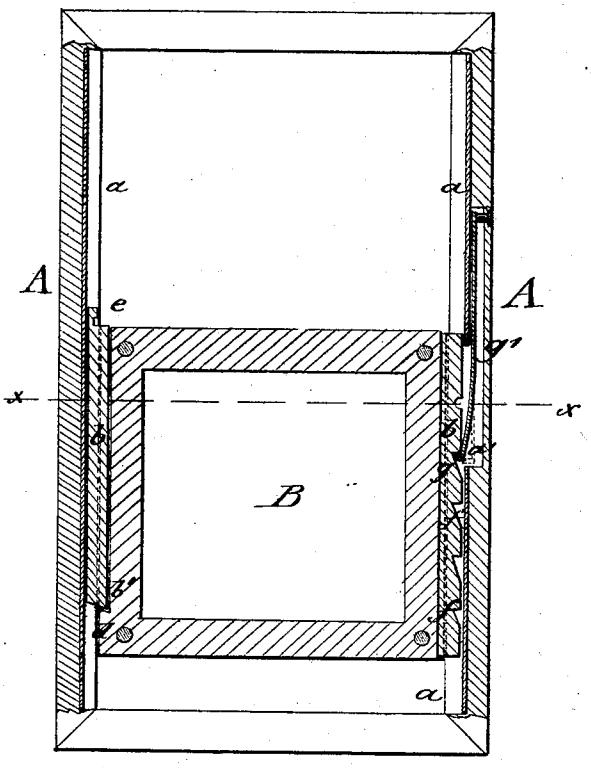


Fig. 3.

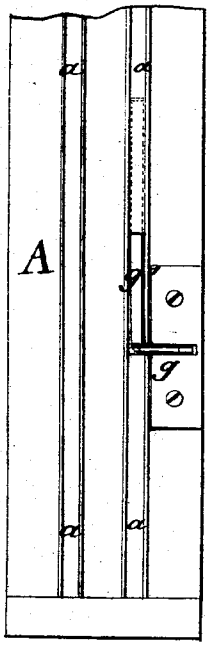
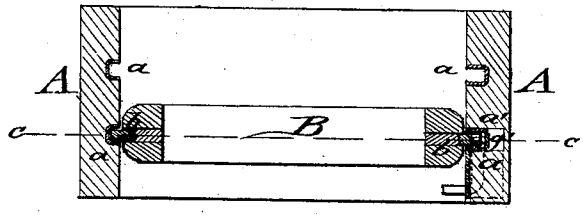


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HIRAM C. BURK, OF NEW CUMBERLAND, OHIO.

IMPROVEMENT IN WINDOW-SASHES.

Specification forming part of Letters Patent No. **147,041**, dated February 3, 1874; application filed November 1, 1873.

To all whom it may concern:

Be it known that I, HIRAM C. BURK, of New Cumberland, in the county of Tuscarawas and State of Ohio, have invented a new and Improved Sash, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section of my improved sash on the line *c c*, Fig. 2, showing the method of sliding and fastening it in the frame; Fig. 2, a horizontal section of the same on the line *x x*, Fig. 1; and Fig. 3, a detail side elevation of the grooved window-frame, with spring-catch.

Similar letters of reference indicate corresponding parts.

The object of my invention is to improve the window-sashes in such a manner that they slide easily in the frame without rubbing off the paint, as in the present sashes, and that they may be quickly and readily detached for repairs, and conveniently fastened.

In the drawing, A represents the window-frame, which is provided, instead of the usual strips for guiding the sashes, with grooves or recesses *a*, which are either lined with sheet metal or not, as may be preferred. The sash B has projecting side rails *b*, of wood, metal, or other suitable material, of which one slides loosely in a groove, *b'*, of the sash, while the other is firmly connected thereto. The sides of sash B facing the window-frame A are rounded off to produce as little friction as possible, and prevent the rubbing off of the paint from the adjoining parts of the frame A. The groove *b'* of the sash does not extend through the full length of the same, but leaves a solid part, *d*, at the lower corner thereof, on which the loose rail *b* is supported, so that it cannot drop out on hoisting the sash. A hook-shaped projection, *e*, at the upper end of loose rail *b*, serves to lift it out of groove *b'*, so that the sash may easily be taken out of the window-frame, as the rounded-off side offers no obstruction to its detachment. The loose rail *b* may also be made of two hinged pieces, by which the taking out of the rail from the sash is more conveniently accomplished. The fixed rail *b* is provided with notches *f*, into which snaps a projecting catch, *g*, of band-spring *g'*, which is suitably applied into a recess, *a'*, of frame A, retaining the sash at any desired position. In this manner the methods of guiding and fastening the sash are combined, so that the sash may not only be easily taken off the frame, but also be furnished at cheaper rates.

As an equivalent for locking the sash into any position in the frame, a lever arrangement may be employed in the recessed lower cross-piece of the sash, instead of the spring-catch *g g'* and notches *f* of fixed rail *b*. These levers project into the guide-grooves of the frame, being fulcrumed at suitable distance from and pivoted to a central button, by the raising or lowering of which the outer ends of the levers bear against the frame, retaining the sash in any desired position by the friction thereon occasioned by its weight.

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

The sash B, provided with rounded-off sides, and arranged with a fixed rail, *b*, with notches *f*, and a loose detachable rail, *b*, which slides in grooves *b'*, and rests on the bottom projection *d*, for retaining the sash by the spring-catch in any position, and detaching it easily from the frame, substantially as set forth.

HIRAM C. BURK.

Witnesses:
ALBERT ALBAUGH,
GEO. P. CRAIG.