

(No Model.)

W. H. KING.
Sash Fastener.

No. 241,026.

Patented May 3, 1881.

Fig. 1.

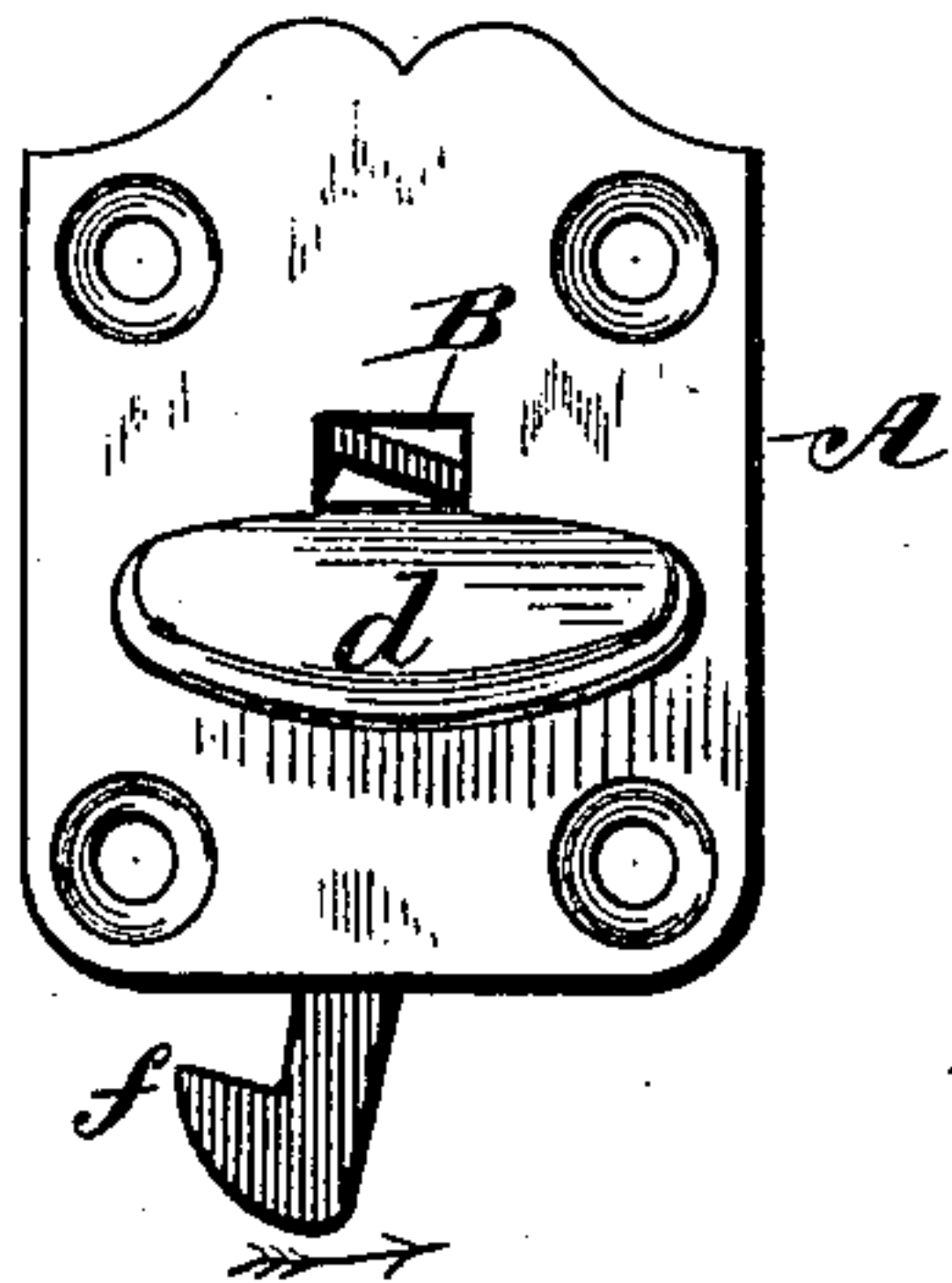


Fig. 2.

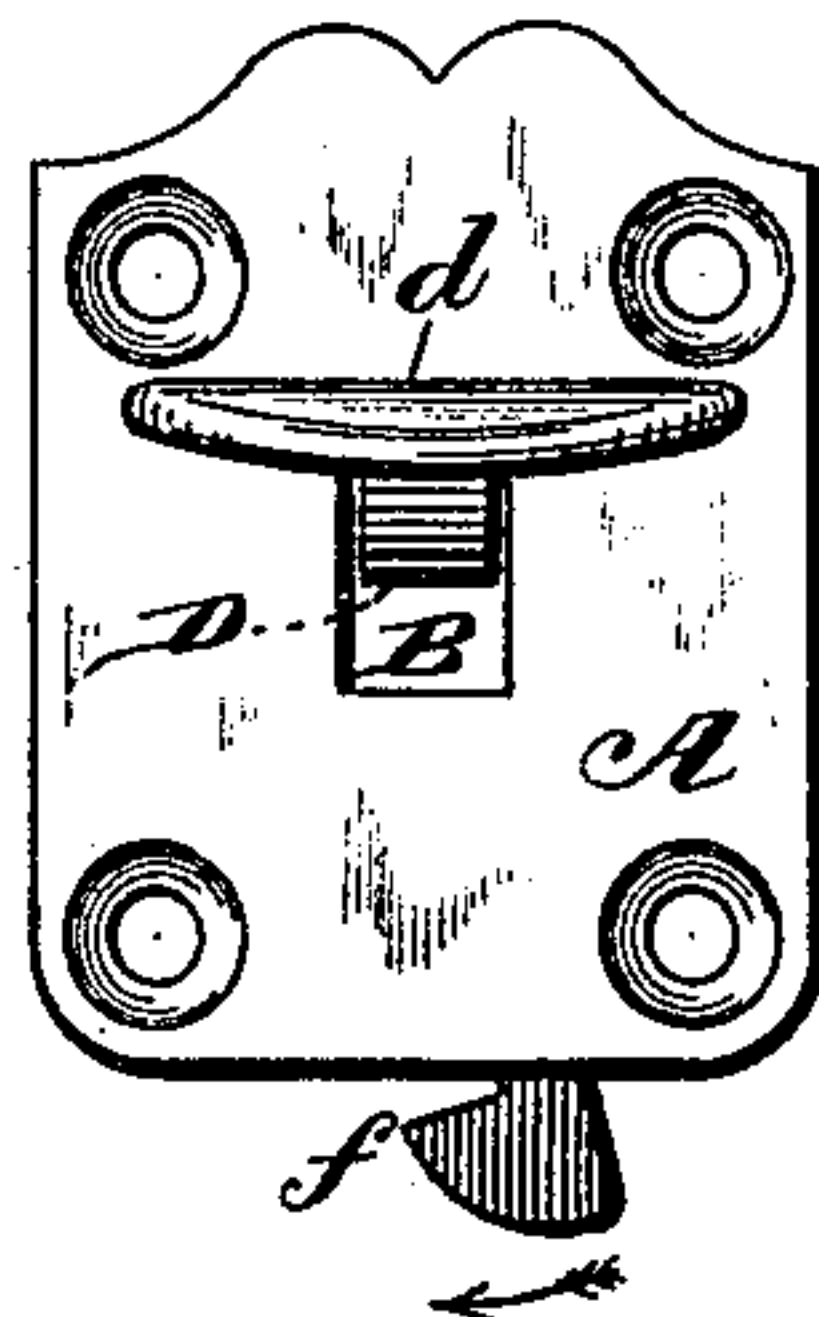


Fig. 3.

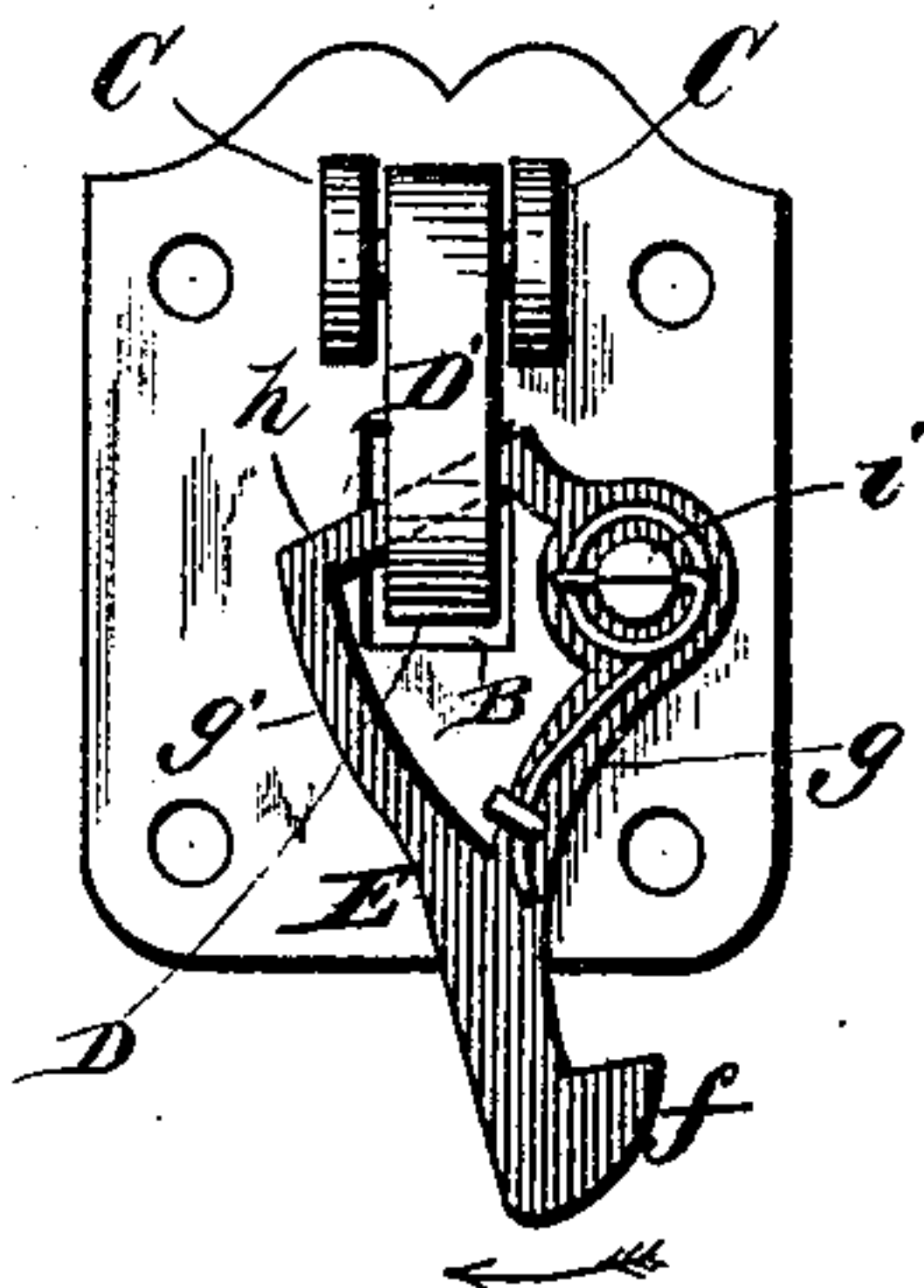


Fig. 4.

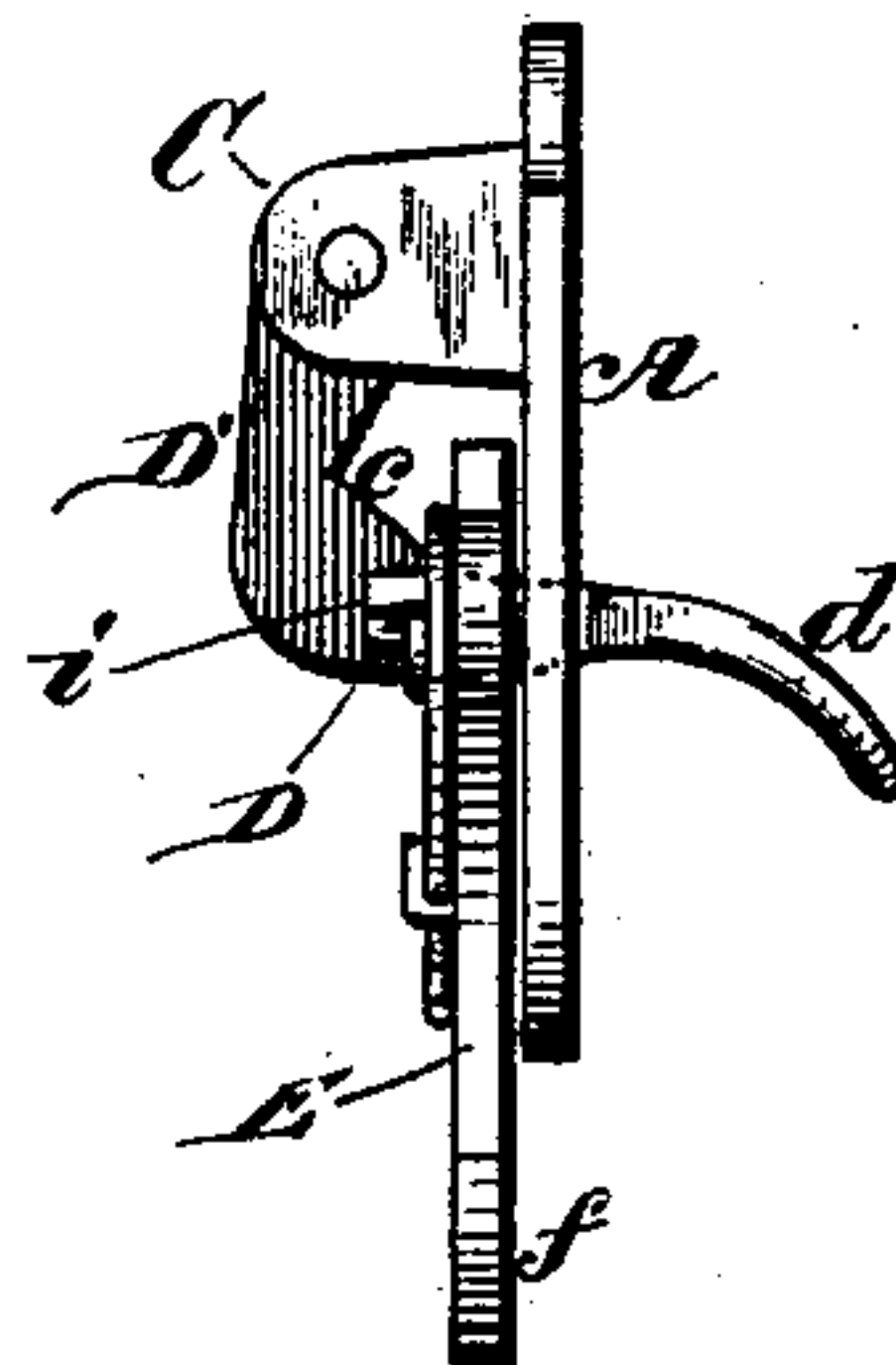
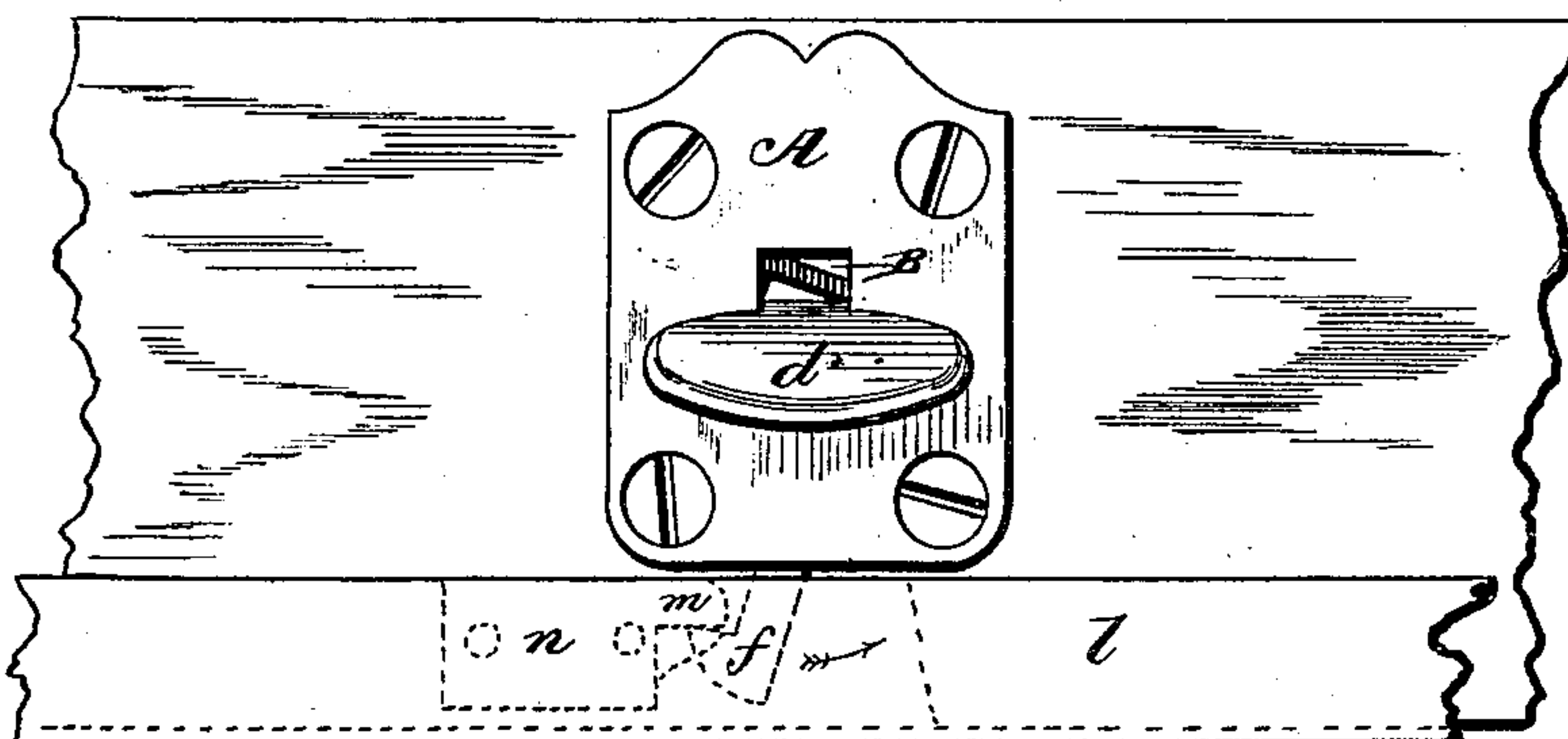


Fig. 5.

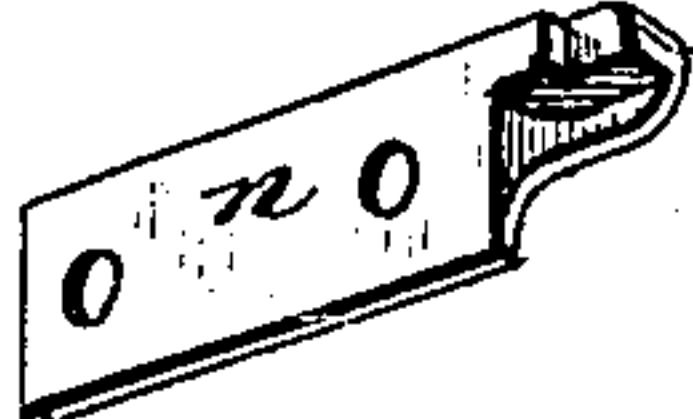


Witnesses.

Robert Everett.

J. A. Rutheford

Fig. 6.



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by James L. Morris
Atty.

UNITED STATES PATENT OFFICE.

W. HASKELL KING, OF ATHOL, MASSACHUSETTS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 241,026, dated May 3, 1881.

Application filed March 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, W. HASKELL KING, a citizen of the United States, residing at Athol, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Sash Locks and Lifts, of which the following is a specification.

This invention relates to a sash lift and lock adapted for arrangement upon the bottom rail of a lower sash, and in which the lock automatically engages with a suitable catch when the sash is down, but is disengaged therefrom and permits the sash to rise when upward pressure is exerted upon the lift.

My invention consists in the combination, with a supporting-plate having at or near its center a slot, of a lift composed of two arms, one of which is pivoted to ears projecting from the rear of the supporting-plate and a sash-lock having a hook and also pivoted to the rear surface of the supporting-plate and provided with an arm projecting above and across the inner pivoted arm of the lift, all of which will be more fully hereinafter described in detail.

Figure 1 is a front elevation of my improved sash-lock and lift, the parts being in position as when the lock engages a catch. Fig. 2 is a similar view with the parts in position as when upward pressure is exerted upon the lift and the lock is thrown out of engagement with its catch. Fig. 3 is a rear view, and Fig. 4 a side view, with the parts in position as in Fig. 1. Fig. 5 is a front view, showing the invention applied to a sash and the lock engaged with a catch secured to the stool-cap. Fig. 6 is a view of a catch suitable for use with my invention.

The letter A designates a supporting-plate having a slot, B, cut through it at about its center and provided with suitable screw-holes, by which it may be attached to the bottom sash-rail.

From the rear surface of the plate A, just above the slot B, project two lugs or ears, C, between which is pivoted the end of an arm, D', projecting at about a right angle from the lift-arm D, which is provided at its front end with the finger-piece d. The main lift-arm D extends through the slot B, somewhat to the rear of the plate A, before it is bent to form

the arm D', and the rear portion of its upper edge joins the arm D' in an oblique direction, as shown at c.

The letter E indicates the pivoted lock provided at its lower end with a hook, f. The upper portion of the lock is forked to form two arms, g g', connected at their tops by an angle-arm, h, at the junction of which with the arm g is arranged a hole or bearing to fit upon a pivot-pin, i, which projects from the rear surface of the plate A on one side of the slot B. The lock being thus loosely pivoted some distance to one side of its center of gravity, it naturally inclines to the same side. The arm h of the lock rests above the lift, and when the latter is raised by pressing upward upon the finger-piece d the inclined face c of the lift is thrown under and strikes the arm h, causing the lock to swing in the opposite direction from its natural inclination, thus, of course, having the effect to disengage the hook f from any fixed catch with which it engages when hanging freely.

In Fig. 5 is illustrated the operation of the invention and the mode of attaching it to a window-sash. The plate A is secured to the front surface of the bottom rail, k, in which a suitable recess is formed behind it to permit the free action of the parts, said recess extending downward, as indicated by dotted lines, to permit the movement of the hooked end of the lock and receive the catch m. The lower edge of the plate A is arranged to meet the top of the stool-cap l or strip, which lies upon the window-sill close in front of the sash when the latter is down. The catch m is formed on a metal plate, n, which is secured to the outer face of the stool-cap in such position that said catch stands in the path of the hook, f, so that as the sash descends said hook will strike said catch and be forced to one side, but swing back under it, as shown in dotted lines, after passing it. When it is desired to raise the window, upward pressure of the finger upon the finger-piece d causes the lock at the same time to swing away and become disengaged from the catch, so that the sash may rise freely. The lift, it will be seen, exerts a positive pressure upon the arm h to disengage the lock, so that the disengagement is certain to take place when an effort is made to raise the sash by

said lift, and thus is avoided the annoyance of tugging at a sash-lift while an imperfectly-acting independent lock prevents it from rising. The operation of my invention does not in any manner depend upon springs, which, as is well known, are very liable to fail, and are a prolific source of annoyance. When the sash reaches its lowest position the lock naturally engages with the catch by gravity.

10 In Fig. 3 I have shown a light spring, *s*, arranged to press the lock against the catch, but this is simply to prevent rattling when the invention is applied to the windows of cars and other vehicles.

15 I do not, of course, limit myself to the precise combination of parts shown, as they may obviously be varied without departing from the principle of my invention—as, for instance, the arm *g'* might be omitted in casting the
20 lock, and the lock might be arranged to hang vertically instead of being inclined to one side, the catch being arranged to engage the lock in a vertical position and the lift to throw

it out of the vertical position to disengage it from the catch. The arm *g'*, however, makes 25 the lock stronger and adds weight to that side to throw it to proper position to engage the catch.

What I claim is—

The combination, with the plate *A*, having 30 slot *B*, of the lift composed of the arms *D* and *D'*, the latter of which is pivoted to the ears projecting from the rear surface of the plate, and the sash-lock *E*, pivoted to the rear surface of the plate and provided with arm *h*, ex- 35 tending above and across the arm *D* of the lift, said lock being provided with a hook, *f*, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 40 witnesses.

W. HASKELL KING.

Witnesses:

JAMES L. NORRIS,
J. A. RUTHERFORD.