(Model.)

S. M. TINKHAM.

SASH FASTENER.

No. 293,820. Patented Feb. 19, 1884.

Fig. 1.

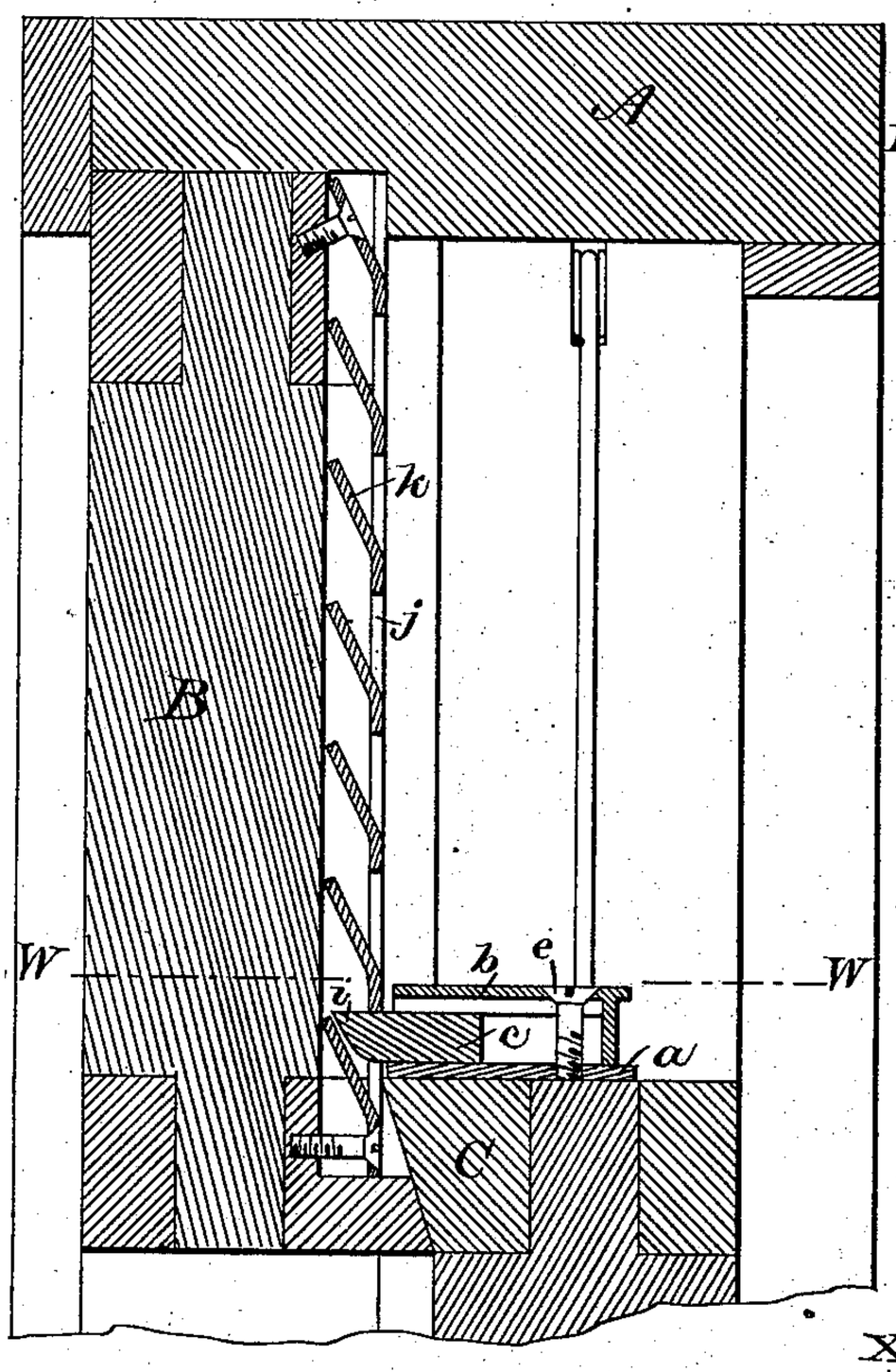


Fig. 4.

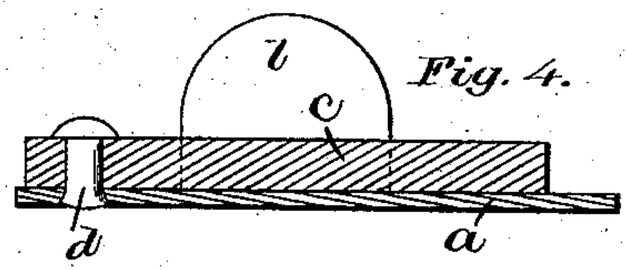


Fig. 3.

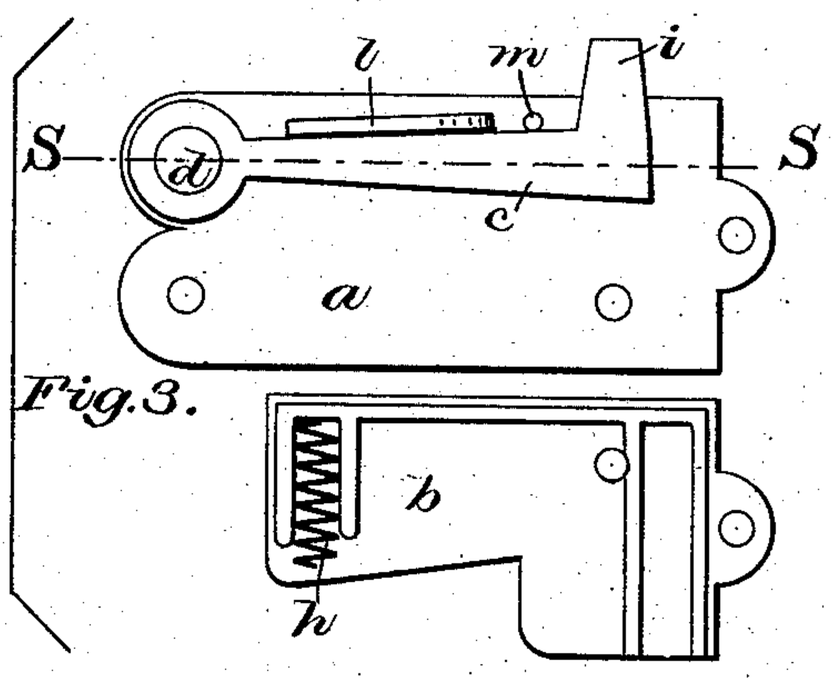


Fig. 5.

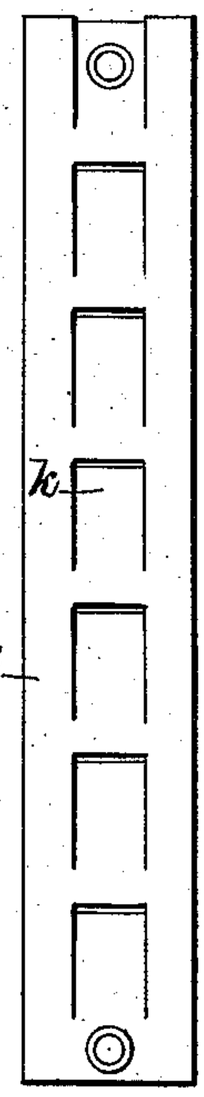
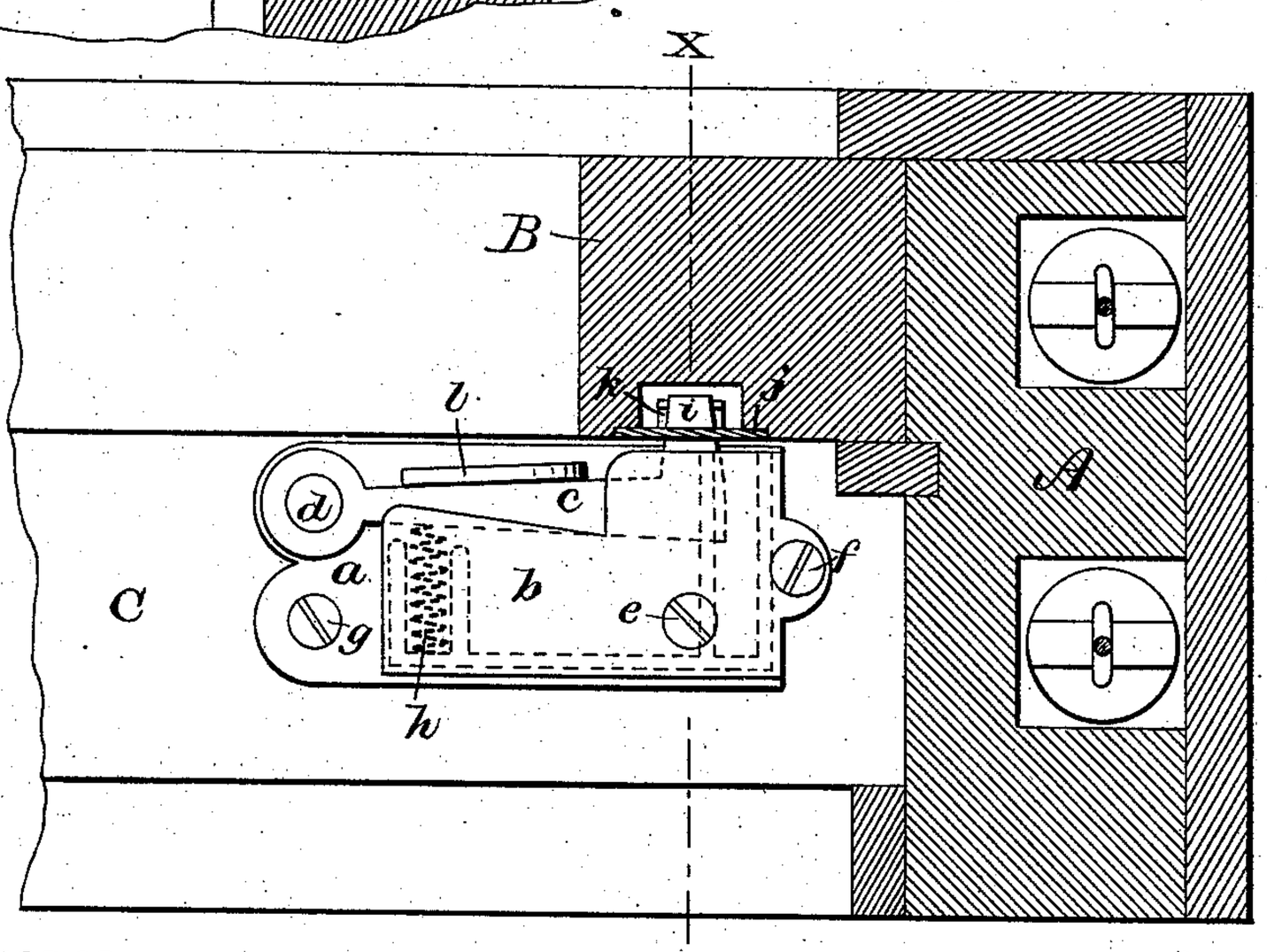


Fig. 2.



Witnesses
H. H. Lettenney.
A. C. Ome

Inventor
Samuel M. Tinkham
per Porter & Hutchinson
Attys

UNITED STATES PATENT OFFICE.

SAMUEL M. TINKHAM, OF TAUNTON, MASSACHUSETTS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 293,820, dated February 19, 1884.

Application filed September 17, 1883. (Model.)

To all whom it may concern:

Be it known that I, SAMUEL M. TINKHAM, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Sash Locks and Supporters, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

This invention relates to that class of sash locks and supporters which are attached to the "meeting-rail" of the lower sash and interlock in the upper sash, and by which the upper sash, if unprovided with counter-weights, may be supported at any desired height, and the two sash may be interlocked when either partially or fully opened or when entirely closed, and when so partially opened and locked either sash may be closed without disturbance of the other and without manipulation of the lock; and it consists in the construction and combination of the divers devices embodied therein, as will, in connection with the accompanying drawings, be hereinafter fully described and claimed.

In said drawings, Figure 1 is a vertical section taken transversely to the plane of the sash, as on line X X, Fig. 2, through the side rail of the upper sash, the connecting ends of the top and meeting rails, the rack-plate, the sash-lock, and the upper portion of the lower sash on which the lock is secured. Fig. 2 is a sectional plan view, the section being taken as on line W W, Fig. 1, and the plan showing the parts below the line. Fig. 3 is a plan view of the lock, the cap being shown as removed and turned upside down, the other parts being in position as assembled. Fig. 4 is a vertical section as on line S S, Fig. 3. Fig. 5 is a front elevation of the rack-plate, taken as viewed from the right in Fig. 1.

In said views, A represents the window-frame. B is the side bar of the top sash, and C is the meeting-rail of the lower sash, which sash is shown in Figs. 1 and 2 as provided with the customary weights.

My improved sash-lock (shown in position in Fig. 2) is formed with base-plate *a*, cap *b*, and angle-lever *c*, the lever being pivoted to *a* at *d*, and cap *b* being secured to *a* by the short screw *e*. This lock is secured to rail C by the wood-screws *f g*, the former passing through ears formed coincidently on bed *a* and cap *b*, the better to secure the lock from either vertical or lateral displacement at the point of its engagement with the rack-plate. The catch-lever *c* is forced outward, as shown in Figs. 2 and 3, by coiled spring *h*, (shown in its recess in Fig. 1 and by dotted lines in Fig. 2,) a stop, *m*, limiting the scope of its movement, and said lever is retracted by means of thumb-piece *l*, which rises therefrom, the cap *b* being obliquely cut away in its front edge to admit such movement of the lever. The rack-plate *j* is formed of a strip of sheet metal, preferably brass, which, by being subjected to suitably-formed dies mounted in a press, has the inclines *k* formed thereon by the shearing action of the dies, which separate said inclines at their end and edges from the main body of the plate, and at the same time bend them to the position shown in Fig. 1. This plate is inserted in a seat cut in bar B, as shown in Figs. 1 and 2, and is secured by screws, as shown, a groove of the requisite depth being formed to receive the inclines, as shown in said figures.

When the two parts of the sash are arranged to close the window, they are locked in that position by the lock and plate, as shown in Fig. 1, and if it is desired to raise the lower sash or to lower the upper one, or both, lever *c* is retracted to release its nose *i* from the plate, when either sash may be moved the desired distance, when the catch will, by the action of the spring *h*, lock the two parts of the sash; and when either or both parts of the sash are partly or fully opened, either may be partially or entirely closed by merely exerting the requisite force thereon, as the inclines *k* will severally throw back the catch as it enters the respective openings in plate *j*.

I am aware that a great variety of sash-locks have been invented and patented which had for their object the interlocking of the two parts of the sash when either closed or partially or fully opened, and that in the use of some of these the catch engages in a deep seat cut in the sash from which it must be withdrawn by hand before the sash can be moved either up or down, while with others a finely-toothed strip of metal is arranged to engage the pawl-like end of a spring-actuated catch,

which is liable, when force is applied or the sash is moved rapidly, to be disengaged from such holding-teeth; but with my invention either or both parts of the sash may be closed without regarding the catch, as the inclines *k* automatically move it out of the seats as the sash is being moved to close it. The rack-plate *j*, being formed of sheet metal, is light and strong, and the nose *i* of the lever has a firm seat and hold therein, so that it cannot be disengaged, except that it be disengaged by the hand before moving the sash. By arranging lever *c* between base *a* and cap *b*, it is firmly supported and held in proper position when the weight of the upper sash or the force applied thereto is exerted upon it, and with the lever-actuating spring it constitutes a finished sash-lock, ready to be applied for use by merely inserting screws *f g*.

I am also aware that a laterally-moving lever having a projection to enter a seat in the sash has been applied directly to the meeting-rail; hence I do not broadly claim such a catch; but

What I do claim as of my invention is—

The sash-lock formed with base *a*, cap *b*, lever *c*, and spring *h*, said lever being pivoted at one end to plate *a*, and at its opposite end formed with angle *i*, and having a thumb-piece, *l*, by which to retract it, all as specified.

SAMUEL M. TINKHAM.

Witnesses:
HENRY WILLIAMS,
JOHN F. MONTGOMERY.