B. BUSH.
Sash-Fastener.

No. 198,345. Patented Dec. 18, 1877.

Fig. 4

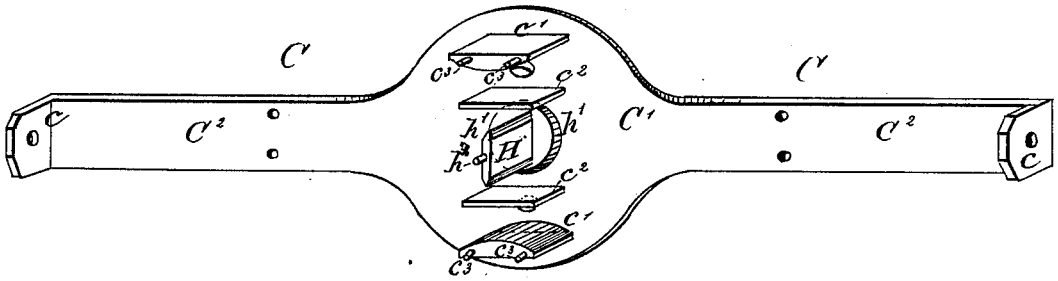


Fig. 2.

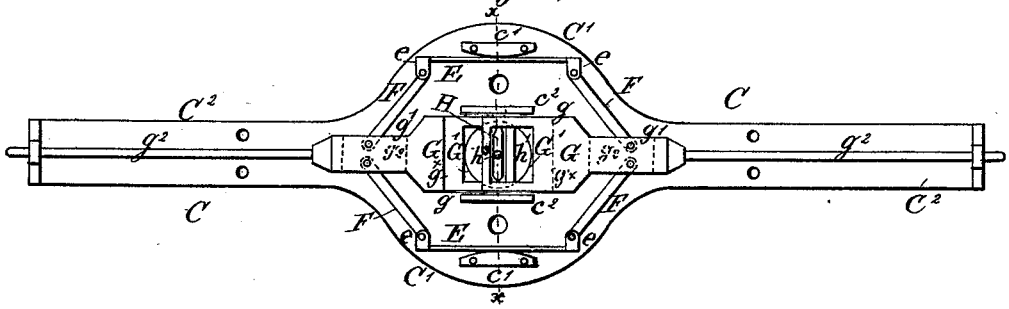


Fig. 1.

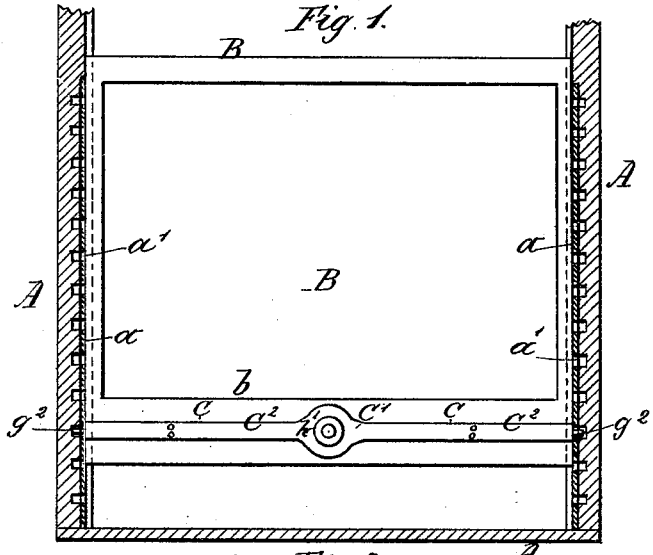
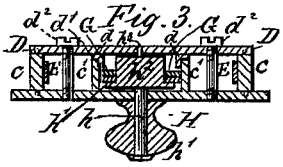


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

BROOKS BUSH, OF FULTON COUNTY, GEORGIA.

IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. **198,345**, dated December 18, 1877; application filed November 1, 1877.

To all whom it may concern:

Be it known that I, BROOKS BUSH, of Fulton county, in the State of Georgia, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification:

My invention consists in the novel construction and combination of a pair of locking levers or bolts, actuated by springs to lock the sash automatically, and so arranged that the sash is locked on both sides simultaneously and at any desired height, and unlocked by turning the knob or key in either direction, to right or left, as hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is an elevation of so much of a sash and frame as to show the application of the fastener. the sash-frame being in section. Fig. 2 is an elevation of the locking mechanism with the bridge-piece removed. Fig. 3 is a transverse section on line *x x* of Fig. 2, with the bridge-piece in position; and Fig. 4 is a perspective view of the back or supporting plate.

In the drawings similar letters of reference are employed to indicate corresponding parts wherever they may occur.

A is the sash-frame, and *a* is a metallic plate secured thereto, and provided with any number of perforations *a'*, to receive the locking-bolts. B is the sash, the lower rail *b* of which is suitably recessed to receive the fastener, so that the back or supporting plate to the mechanism will lie flush with the surface of the sash.

The sash-fastener consists of the back or supporting plate C, formed of a central circular and enlarged portion, C^1, and of the arms or extensions C^2, the latter having perforated lugs or projections *c* formed at right angles to their outer extremities, these lugs *c* serving as supports for and guides to the locking-bolts. The arms C^2 extend clear across the sash, as shown in Fig. 1. c^1 c^1 and c^2 c^2 are four upright lugs or plates formed on or secured to the circular enlarged portion C^1 of the plate C, and serve to hold in position and guide the locking mechanism. D is a bridge-piece, provided on its under side with two angle-pieces, *d*, so located that when the bridge is in position the projecting part d^1 of the angle-pieces will lie on the inside of the upright lugs c^1, and d^2 are screws to screw the bridge to the plate C, and hold the locking mechanism securely in position.

The lugs c^1 c^1 are, by preference, removably connected with the plate C, and are each provided with pins c^3 on their upper and lower faces, which enter corresponding holes in the back plate C and the bridge D.

I prefer this arrangement, as it facilitates the mounting of the plate or bow-springs E, which are affixed to the lugs or plates c^1, as shown, each spring being provided at its outer extremities with forked ears *e*, between which one end of the toggle-levers F is pivoted, the other end of such levers being pivoted in slots g^2, formed in the arms g^1 of the bolts G. The bolts G consist of a central enlarged part, *g*, having square slots or apertures G^1, and lie in a position one above the other, being shouldered at $g^\times$, to limit their backward throw when operated by the key H, and of the extensions or arms g^1, to which the toggle-levers F are connected, and the locking bolts or rods g^2 formed on or connected with the outer end of extensions or arms g^1. H is the operating-key upon the shaft *h*, on which is mounted the knob or handle h^1 on the outside of the plate C. The shaft *h* on the inside of the plate carries an annular metallic washer, h^1, upon which the locking-bolts G, rest and above this washer, and formed thereon or otherwise connected therewith, is located the key-piece h^2, or actuating-plate, both outer faces of which are slightly beveled to facilitate its action upon the inner lateral faces of the slots G^1, within which the key piece or plate h^2 is located.

h^3 is a stud or pin formed on the upper face of the key-piece h^2, on a line with the axis of the spindle *h*. This pin enters into a recess or perforation in the bridge D, which thus holds the key H in its proper position, and prevents any lateral deflection or movement of said key.

It will be obvious, from what has been said above, that by this arrangement of locking-bolts the locking of the sash is effected automatically upon the release of the knob h^1, by

the bow-springs actuating the four toggle-levers, and that the unlocking may be effected by turning said knob either to the right or left.

It will also be understood that I do not wish to limit myself to the manner of connecting the toggle-levers to the springs and locking-bolts, as this may be varied without departing from the spirit of this invention. For instance, the outer ends of the springs may be twisted, so as to stand at right angles to the main part of the spring, and the toggle-levers may be forked at both ends to embrace the rectangular part of the springs, as well as the locking-bolts, thus dispensing with the slots g^2; or that end of the toggle-levers may be pivoted upon or on the under side of the bolts, as may be desired.

The sash-fastener being simple in construction, and from the description thereof, as detailed above, and by reference to the drawings hereto annexed, its operation will be readily understood, and needs, therefore, no further description.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The plate C and the removable plates c^1, provided with pins or studs c^3, in combination with the springs E, toggle-levers F, bolts G, and the bridge D, all constructed and operating substantially as described, for the purpose specified.

2. The supporting-plate C, having lugs or plates c^2, and the removable plates c^1, in combination with the springs E, toggle-levers F, bolts G, bridge D, and the fastening-screws d^2, all constructed and operating substantially as described, for the purpose specified.

3. The combination of the plate C, constructed as described, the springs E, toggle-levers F, and bolts G, having slots G^1 and shoulders g^x, and the bridge D, with the key H, all constructed, arranged, and operating substantially as described, for the purpose specified.

In witness that I claim the foregoing I have hereunto set my hand.

BROOKS BUSH.

Witnesses:
F. M. TRIMMIER,
H. F. EVANS.