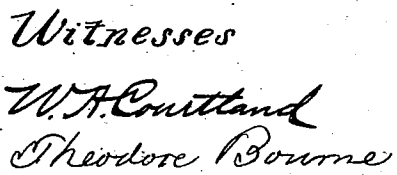


No. 477,891.

Patented June 28, 1892.



Inventor
James N. Ewer
by T. F. Bourne
his Attorney.

UNITED STATES PATENT OFFICE.

JAMES N. EUWER, OF NEW CASTLE, PENNSYLVANIA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 477,891, dated June 28, 1892.

Application filed July 22, 1891. Serial No. 400,275. (Model.)

To all whom it may concern:

Be it known that I, JAMES N. EUWER, a citizen of the United States, and a resident of New Castle, Lawrence county, Pennsylvania, have invented certain new and useful Improvements in Sash and Door Fasteners; of which the following is a specification.

The object of my invention is to provide a fastener that will hold a sash securely at different heights or a door closed, and that shall be burglar-proof when properly set, which fastener shall be simple in construction, easy to manipulate, and cheap to manufacture.

The invention consists in the novel details of improvement and the combinations of parts that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a vertical cross-section of my improved fastener on the plane of the line C C, Fig. 2, showing a portion of a window-sash. Fig. 2 is a rear elevation of the fastener, showing part of the window-casing in section. Fig. 3 is an edge view of a window-sash having the perforated plate attached. Fig. 4 is a plan view of the fastener, its top plate being removed, the bolt being in the forward or locking position. Fig. 5 is a similar view, the bolt being withdrawn; and Fig. 6 is a sectional plan view showing the holding-tongue on the top plate.

In the drawings the letter A indicates the front plate of my fastener or lock, on one side of which is a casing B, shown having an open back and top, said casing being shown composed of two side plates *a a* and a bottom plate *b*. (See Fig. 2.) The plate A and casing B are preferably cast in a single piece of metal, whereby a cheap construction is produced. The plate A has apertures *a*² for screws to secure it in position. D is a cover for the casing B, which preferably consists of an angle-plate, one part *d* of which covers the back of the casing B, while the part *e* covers the top thereof. The forward edge of the part *e* of the cover D has a projection *f*, that passes into an aperture *g* in the main plate A (see Fig. 6) to hold the cover in position, and the lower edge of

the part *d* of the cover D has a projection *h*, that passes into a socket or recess *i* in the outer edge of the bottom plate *b* of the casing B, (see Figs. 1 and 2,) the lower edge of the part *d* resting on the plate *b*, as in Fig. 2, whereby the cover D is supported at its outer part.

E is a rod or bolt that passes through the plate A and is secured to the projection *h*. (See Fig. 1.) By the foregoing arrangement the cover D is readily held in position and a cheap construction is produced. The back plate *d* comes about flush with the outer edges of the side plates *a*, so that a very shallow casing is produced. Only one bolt is needed to hold the casing, its cover, and the plate A together, the projection *f* keeping the cover D from vertical or lateral movement. The casing B is preferably rectangular, as shown.

Within the casing B is a sliding bolt F for holding the sash G or the part to be secured, which bolt is shown rectangular at one part so as to slide freely within the casing B without turning, the forward part F² of said bolt projecting through an aperture *j* in the plate A, so as to hold the sash G or the like. In the rear of the bolt F is a socket or recess *l*, within which is a coiled spring H, which rests at one end against the plate *d*. (See Fig. 1.) The spring H pushes the bolt F forward; but when the bolt F is pressed back the spring H is compressed into the socket *l*. (See Fig. 5.) By this means I am enabled to use a very short bolt F, and the spring H, by folding within the bolt, does not occupy any more space behind the bolt than the distance the bolt travels, whereby I am enabled to produce a very short fastener. This is essential so that the sash-weight will have room to travel without engaging the fastener, as the fastener is to be placed in the frame of the window at the edge of the sash.

To push the bolt F back within the casing B, I use a bar I, having one edge *m* inclined inwardly and forwardly, as shown in Figs. 4 and 5, which bar comes against a projection J on the bolt F, (see Figs. 1, 4, and 5,) so that when the bar I is pushed forward the bolt F will be moved inward, as in Fig. 5. The bar

I lies between the bolt F and the top plate *e* of cover D, (see Fig. 1,) whereby it is guided, and the straight side *n* of the bar I rides along a projecting ledge *o* on the inner side of the plate A, upon which, also, the cover D rests. (See Fig. 1.) The forward or outer end of the bar I is hook-shaped, as at I², to catch on the projection J to prevent the bar I from becoming detached from the casing B and bolt F. (See Fig. 4.) The side of the projection J that engages the inclined side *m* of the bar I is curved or beveled, as shown, so that the bar I will freely slide over the same and friction will be reduced. It is this curved side of the projection J that enables the bolt to be easily moved by the bar I. The bar I is held in the normal position with its narrow part in line with the projection J (see Fig. 4) by means of a spring K, interposed between an upright L on the rod I and a projection M on the cover D. (See Fig. 2.) The ends of the spring K are preferably let into recesses *p q* on the inner sides of the upright L and projection M, respectively. (See Fig. 2.) To withdraw the bolt F, the rod I is pushed forward, so that its inclined side *m* rides on the projection J and moves the bolt F into the position shown in Fig. 5, thereby compressing the springs H and K. When the rod I is released, the spring K moves it backward and the spring H moves the bolt F forward.

In order to readily operate the rod I, (it being placed within the frame-work of the window,) I pass a rod N through the side of the window-frame O, the inner end of which rod N abuts against the end of rod I or its upright L, the outer end being in position to be pushed by the fingers. (See Fig. 2.) I prefer to recess the outer side of the frame O, as at *r*, and insert a cap *s* therein, as in Fig. 2, the end of the rod N preferably being within the cap *s*, as shown, so as not to project from the casing. To withdraw the bolt F to release the sash, the rod N is pushed inward, which operates the rod I in manner before stated. By removing the rod N after locking the window with this fastener burglars will not be able to raise the window G. My improvement may therefore be termed "burglar-proof."

The bolt F enters apertures in the side of the window G, and for this purpose I prefer to cut a groove *t* on the edge of the window, and over this groove I place a perforated plate P to receive the bolt F. (See Fig. 1.) The plate P has side lugs *n*, by means of which it is secured to the window-sash G. (See Fig. 3.)

It is designed that one of these fasteners will be used for the upper sash and one for the lower sash, whereby either sash can be raised or lowered and securely held independently, and the sash is always locked and locks automatically.

This fastener is very cheap to make, has but few parts, and is not liable to get out of order. It cannot be tampered with by burglars, as it is embedded within the casing of the window, and either the upper or lower sash can be set at any desired height without fear of its being moved by unauthorized persons.

Of course this lock can be used on doors or elsewhere, as may be desired, and will be inserted in the frame-work out of sight and can only be reached by the rod N.

Having now described my invention, what I claim is—

1. In a lock or fastener, the plate A, having aperture *g*, and the casing B, composed of side plates *a a* and bottom plate *b*, combined with the cover D, having back plate *d* and projection *h* thereon, top plate *e*, having projection *f* to enter the aperture *g*, and rod E, connecting the projection *h* with the plate A and with a bolt carried by the casing, substantially as described.

2. In a lock or fastener, the plate A and a casing carried thereby, combined with a sliding bolt within said casing, said bolt having a recess *l* and with a coiled spring within said recess, and a rod with a beveled part for actuating said bolt, substantially as described.

3. In a lock or fastener, the combination of the casing with a bolt sliding therein and having a stationary projection J thereon, the wearing side of said projection being curved or rounded, combined with a bar I, having an inclined edge *m* to engage the projection J to move the bolt, substantially as described.

4. In a lock or fastener, the combination of a casing and its front plate, a sliding bolt within said casing and having a recess *l*, a coiled spring within said recess, said bolt projecting through said front plate, a projection J on said bolt, a rod with a beveled part I to engage said projection to move the bolt, and a rod, as N, for moving the rod I, substantially as described.

5. In a lock or fastener, the combination of a casing having a front plate and a ledge *o* within said casing, a sliding bolt within said casing, said bolt having a recess *l*, a spring H in said recess, and a projection J on said bolt, a rod I, having an inclined side to move the bolt, and a straight side that rides on the ledge *o*, said rod I having a hook-shaped end to engage the projection J to prevent the rod I from being detached from the bolt, substantially as described.

6. In a lock or fastener, a casing, a projection M on the same, and a sliding bolt within the same, combined with a bar having an inclined side to move said bolt, a projection L on said bar, and a spring interposed between the projections L and M, substantially as described.

7. In a sash-fastener, a casing and a slid-

ing bolt within the same, combined with a bar
having an inclined side to move said bolt and
an independent spring to move said inclined
bar, and with a rod for moving the latter, but
5 detached therefrom and adapted to be pushed
through the frame-work of the window to
operate the inclined rod, substantially as de-
scribed.

In testimony that I claim the foregoing as
my invention I have signed my name, in pres- 10
ence of two witnesses, this 4th day of May, 1891.

JAMES N. EUWER.

Witnesses:

C. L. WALKER,
T. F. BOURNE.