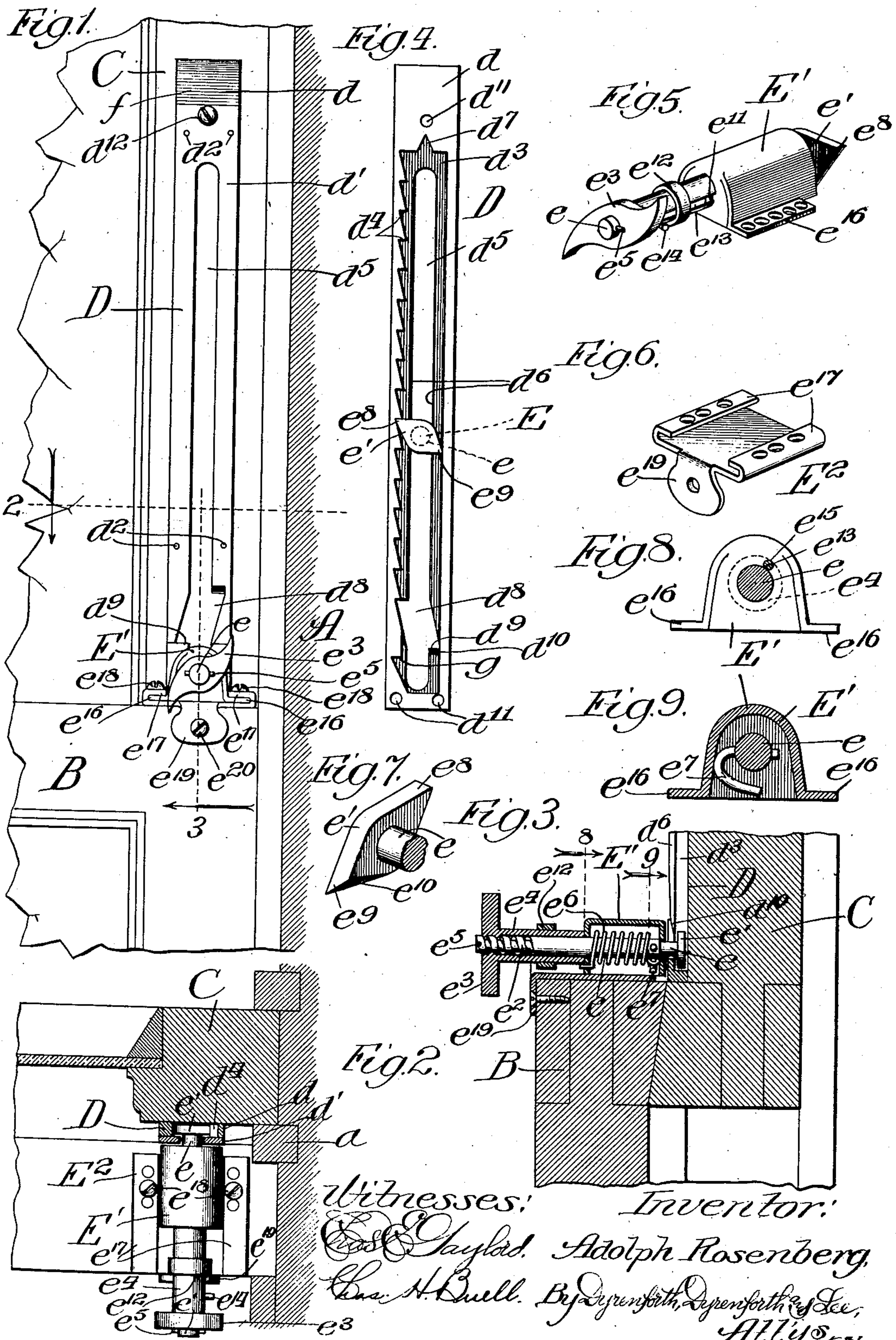


No. 801,400.

PATENTED OCT. 10, 1905.

A. ROSENBERG.  
WINDOW FASTENER.  
APPLICATION FILED JULY 7, 1905.





# UNITED STATES PATENT OFFICE.

ADOLPH ROSENBERG, OF CHICAGO, ILLINOIS.

## WINDOW-FASTENER.

No. 801,400.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed July 7, 1905. Serial No. 268,620.

*To all whom it may concern:*

Be it known that I, ADOLPH ROSENBERG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Window-Fastener, of which the following is a specification.

My present invention constitutes an improvement upon the window-fastener described in my pending application, Serial No. 237,835, filed December 21, 1904.

My primary object is to make provision for the automatic locking of the window at any position within the limits of operation of the fastener, as well as for greater security of the fastener.

The invention is illustrated in its preferred embodiment in the accompanying drawings, in which—

Figure 1 is a broken elevational view of a window equipped with my improved fastener; Fig. 2, a broken plan section taken as indicated at line 2 of Fig. 1; Fig. 3, a broken vertical section taken as indicated at line 3 of Fig. 1; Fig. 4, an inner face view of the keeper, showing the head of the bolt entered in the keeper; Fig. 5, a perspective view of the bolt and its casing; Fig. 6, a perspective view of a fastening-plate for the bolt-casing; Fig. 7, a broken perspective view of the bolt; Fig. 8, a section taken as indicated at line 8 of Fig. 3, the bolt being secured, however, in such position as to enable it to slide within the keeper as the window is opened for ventilating purposes; and Fig. 9, a section taken as indicated at line 9 of Fig. 3.

In the construction shown A represents a window-frame; B, a lower window-sash; C, an upper window-sash; D, the keeper of my improved fastener applied to the upper sash, and E the bolt of the fastener, movable in a casing E', adjustably connected with a sash-plate E<sup>2</sup>, applied to the upper surface of the lower sash.

The keeper is of elongated form and preferably is applied to the inner surface of a vertical member of the upper sash adjacent to the parting stop *a* of the window. When stamped from sheet metal, it preferably comprises, as shown, a bottom or inner plate *d* and a thinner top plate *d'*. This is for convenience of manufacture. The two plates are firmly connected by rivets *d*<sup>2</sup>, so that the keeper virtually is integral in structure. The inner plate—that is, the one next to the sash—has a wide longitudinal slot *d*<sup>3</sup>, at one

lateral wall of which are teeth *d*<sup>4</sup>. The plate *d'* has a superposed narrower slot *d*<sup>5</sup>, the bordering metal forming flanges *d*<sup>6</sup>, beneath which the head of the bolt may pass. When the keeper is applied to the sash, the space represented by the slot *d*<sup>3</sup> virtually forms a chamber for the head of the bolt. At the upper end of the slot *d*<sup>3</sup> is a V-shaped recess *d*<sup>7</sup> for receiving and preventing injury to the locking-point on the head of the bolt under conditions hereinafter described, and near the lower end of the slot *d*<sup>5</sup> is a socket or enlarged opening *d*<sup>8</sup>, which is formed by cutting the flanges *d*<sup>6</sup> to permit the bolt-head to enter. At the lower end of the socket there is a shoulder *d*<sup>9</sup>, which projects slightly above the adjacent external surface of the keeper and is internally beveled at *d*<sup>10</sup>, serving the function of insuring that the bolt shall enter the socket when the window is being closed from a wide-open position. The keeper is provided with perforations *d*<sup>11</sup>, through which pass screws *d*<sup>12</sup>, (one shown,) securing it to the sash.

The bolt E comprises a stem *e*, equipped at its inner end with an elongated head *e'* and provided at its outer end with a thread *e*<sup>3</sup>, and a handle or winged nut *e*<sup>3</sup>, threaded to turn upon the thread *e*<sup>2</sup> and equipped with an inwardly-extending sleeve *e*<sup>4</sup>, bearing against the outer end of the bolt-casing. A cotter-pin *e*<sup>5</sup> limits the outward movement of the handle with relation to the stem upon which it is threaded. The bolt is encircled within the casing by a spiral spring *e*<sup>6</sup>, having one end connected with the casing and the other with a pin *e*<sup>7</sup>, passing through the bolt, so that the spring tends both to press the bolt inwardly toward the sash and to rotate the bolt on its axis. The bolt-head has a tooth-engaging point *e*<sup>8</sup> and a wall-engaging point *e*<sup>9</sup>, and the spring normally turns the bolt to a locking position, such as is indicated in Fig. 4, with the head confined between the teeth and the opposite wall of the slot *d*<sup>3</sup>. The bolt-head also has a beveled surface *e*<sup>10</sup>, which engages the beveled surface *d*<sup>10</sup> to insure the automatic entrance of the bolt at the socket *d*<sup>8</sup> when the window is closed from a wide-open position.

As shown in Fig. 9, the pin *e*<sup>7</sup> serves by engagement with the walls of the casing to limit the rotation of the bolt. The sleeve *e*<sup>4</sup> is provided with a longitudinal groove *e*<sup>11</sup>, in which is confined by a ring *e*<sup>12</sup> a slide *e*<sup>13</sup>, equipped with a finger-piece *e*<sup>14</sup>. The casing E' has adjacent to the bore which receives the bolt a



perforation  $e^{15}$  for receiving the slide  $e^{13}$ . When the handle  $e^3$  is turned to its limit to the left, as viewed in Fig. 1, the channel  $e^{11}$  registers with the perforation  $e^{15}$  and the slide 5 may be shoved in to key the sleeve to the casing, thereby securing the bolt in its angularly-retracted position, permitting the window to be opened freely while the bolt-head moves in the keeper till the upper end of the keeper-slot is encountered. The keeper has a beveled 10 outer surface  $f$  at its upper end, upon which the bolt-head rides in the operation of closing the window from the wide-open position. The bolt-casing has its base equipped with 15 outturned flanges  $e^{16}$ , engaging flanges  $e^{17}$  on the horizontal portion of the plate  $E^2$ . The flanges have a plurality of perforations receiving screws  $e^{18}$ , providing for adjustment. The plate  $E^2$  has a downturned perforate lug 20  $e^{19}$ , receiving a horizontal securing-screw  $e^{20}$ . As the screws  $e^{18}$  pass also into the wood, it is evident that the bolt-casing is very securely fastened to the sash, preventing the possibility of prying the casing loose. The spaces be- 25 tween the perforations in the flanges  $e^{17}$  vary, and the pair of screws  $e^{18}$  may pass through any selected pair of perforations, thus providing for a differential adjustment enabling the greatest accuracy to be observed in ad- 30 justing the bolt with relation to the keeper. The operation may be summarized thus: Assuming the window to be wide open, it may be closed without regard to the fastener, the bolt riding freely over the keeper until the 35 socket is encountered, when the bolt enters the socket and becomes engaged with the lowermost locking-shoulder of the  $d^4$  series, (indicated by  $g$ .) In this position the sashes may be drawn together firmly by turning the nut 40  $e^3$  to the right. The bolt may be turned to the left against the force of its spring and the sashes adjusted to any desired degree of opening, the bolt rotating immediately upon release to the locking position. If desired, the 45 catch  $e^{13}$  may be employed to hold the bolt in its angularly retracted or rotated position, thus enabling the window to be opened within the limits of the fastener without the necessity of holding the bolt by hand. Of course 50 the nut may be turned to the right to bind the sashes together at any desired degree of opening. When desired, the bolt may be forcibly withdrawn from the opening  $d^8$ , in which case the bolt will ride upon the keeper as the 55 sashes are moved with relation to each other, permitting the window to be thrown wide open.

An important feature of the construction is that the bolt passes from the upper end of the 60 keeper to the lowermost locking position without leaving the keeper, thus obviating danger of tampering with the device. Furthermore, the device operates automatically at all times to effect a locking engagement regardless of 65 the position from which the window is closed.

Changes in details of construction within the spirit of my invention may be made. Hence no undue limitation should be understood from the foregoing detailed description. The keeper may be cast or stamped and may be integral 70 in formation or of sectional construction.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a window-fastener, the combination of an elongated keeper equipped with locking- 75 shoulders, a bolt having a shoulder adapted to engage therewith, and a spring connected with the bolt and serving both to force it inwardly longitudinally and rotate it on its axis, whereby automatic locking is effected, for the pur- 80 pose set forth.

2. In a window-fastener, the combination of a chambered slotted keeper having a plurality of internal lateral teeth and provided with a socket whereat a bolt-head may enter, and a 85 spring projected and rotated bolt having a tooth-engaging shoulder, for the purpose set forth.

3. In a window-fastener, the combination of a keeper having a chamber equipped at one 90 lateral wall with locking-shoulders and having the opposite wall smooth, said keeper having a slot for the shank of a bolt and flanges bordering said slot, and a spring projected and rotated bolt having a head adapted to 95 move in said chamber and equipped with a locking-shoulder, the bolt being normally rotated by its spring into locking engagement, for the purpose set forth.

4. The combination of an elongated keeper 100 having a sloping surface at its upper end and provided with a longitudinal slot having a shoulder at its upper end and an enlarged opening a short distance above its lower end, said keeper having a lateral internal locking- 105 shoulder beneath said enlarged opening, and a spring projected and rotated bolt having a head adapted to enter the keeper at said enlarged opening and provided with a lateral locking-shoulder, for the purpose set forth. 110

5. The combination of a chambered, slotted keeper having a sloping external surface at its upper end and provided with a plurality of internal teeth at one side of its chamber and with an enlarged opening near the lower end 115 of its slot, one of said teeth being below said enlarged opening, a bolt having a head provided with a lateral tooth-engaging shoulder, a bolt-casing, and a spring connected with said bolt and casing and serving both to ro- 120 tate and project the bolt, for the purpose set forth.

6. The combination of a chambered, slotted keeper having a sloping external surface at its upper end and having above its lower end 125 an enlarged opening and beneath said opening a locking-shoulder corresponding with the closed position of the window, means on said keeper projecting above the face thereof for engaging a bolt-head and directing it into 130



said enlarged opening when the window is being closed from a wide-open position, and a spring-projected headed bolt coacting with said keeper, for the purpose set forth.

5 7. The combination of a chambered, slotted keeper provided with an enlarged opening above the lower end of its slot and with an internally-beveled projection at the base of said opening, and a spring-held bolt having  
10 a head provided with a beveled surface adapted to engage said projection when the window is closed from a wide-open position, for the purpose set forth.

15 8. The combination of a keeper provided with laterally-presented teeth, a bolt-casing, a bolt having a head equipped with a lateral tooth, a spring connected with said bolt and casing and serving both to project and rotate the bolt, and a handle having a bearing on  
20 the bolt-casing and threaded connection with the bolt, for the purpose set forth.

9. The combination of a keeper provided with laterally-presented teeth, a bolt-casing, a bolt having a head equipped with a lateral  
25 tooth, a spring connected with said bolt and casing and serving both to project and rotate the bolt, and a handle having threaded connection with the bolt and equipped with a sleeve bearing against the adjacent end of the  
30 bolt-casing, for the purpose set forth.

10. The combination of a keeper having a longitudinal bolt-engaging flange and equipped with laterally-presented teeth, a bolt-casing, a bolt rotatable and longitudi-  
35 nally movable therein, a spring tending both to rotate and project the bolt, and means, which may be employed at will, for restraining the bolt from rotation during its longitudinal movement, for the purpose set forth.

40 11. The combination with a keeper and bolt, of a bolt-casing equipped with horizontal and vertical attaching means, and vertical and

horizontal attaching-screws, for the purpose set forth.

12. The combination with a keeper and bolt, 45 of a bolt-casing equipped with horizontal flanges each provided with a series of perforations, a sash-plate having a guide for said flanges and equipped with a plurality of pairs of perforations unequally spaced, and attach- 50 ing-screws, for the purpose set forth.

13. The combination with a keeper and bolt, of a bolt-casing equipped with outturned flanges provided with perforations, a sash-plate equipped with inturned flanges provided 55 with perforations and having a downturned outer end provided with a perforation, and vertical and horizontal attaching-screws, for the purpose set forth.

14. The combination of a chambered, slot- 60 ted keeper equipped with internal lateral teeth and having an internal V-shaped notch at the upper end of its chamber, and a spring rotated and projected bolt having a head provided with a lateral tooth, for the purpose set forth. 65

15. The combination of a chambered keeper provided with a longitudinal slot closed at its upper end and having an enlarged opening near the lower end of the keeper and an internal locking-shoulder adjacent to said enlarged 70 opening with bolt-engaging flanges adjacent to said locking-shoulder, and a bolt equipped with a head slidably engaging said flanges and adapted to engage said locking-shoulder, said locking-shoulder corresponding with the 75 closed position of the window and engagement between the same and the bolt being effected without withdrawal of the bolt from the keeper when the window is closed from the ventilating position, for the purpose set forth.

ADOLPH ROSENBERG.

In presence of—

L. HEISLAR,

J. H. LANDES.