

E. S. KELLY.
 WEATHER GUARD AND SASH LOCK.
 APPLICATION FILED OCT. 30, 1909.

982,828.

Patented Jan. 31, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

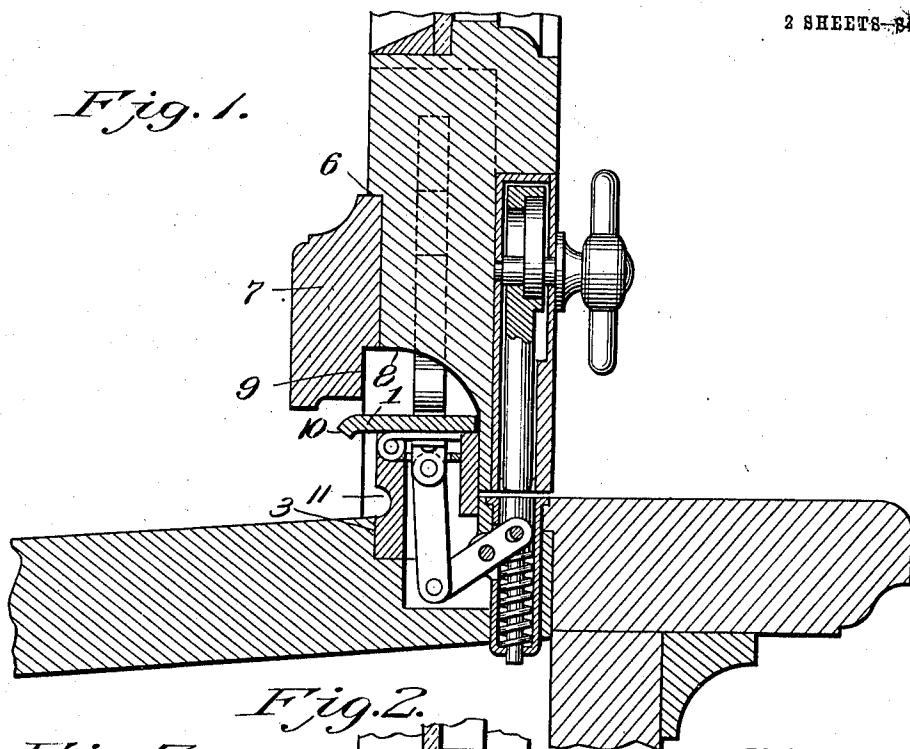


Fig. 2.

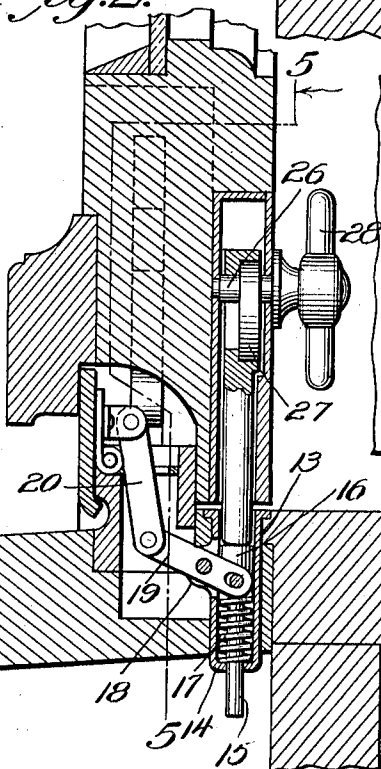


Fig. 3.

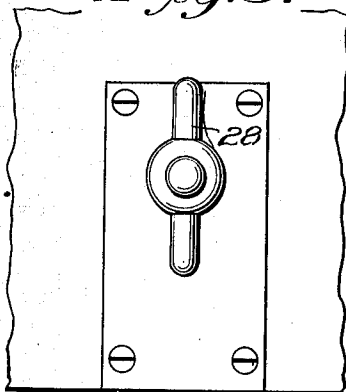
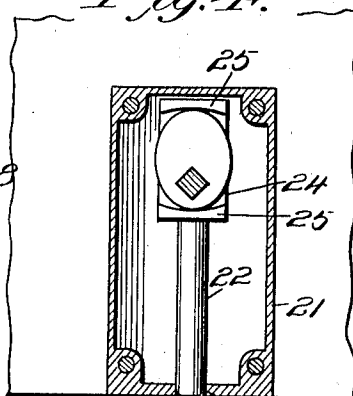


Fig. 4.



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Witnesses

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 D. W. Gould

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2 SHEETS—SHEET 2.

Fig. 5.

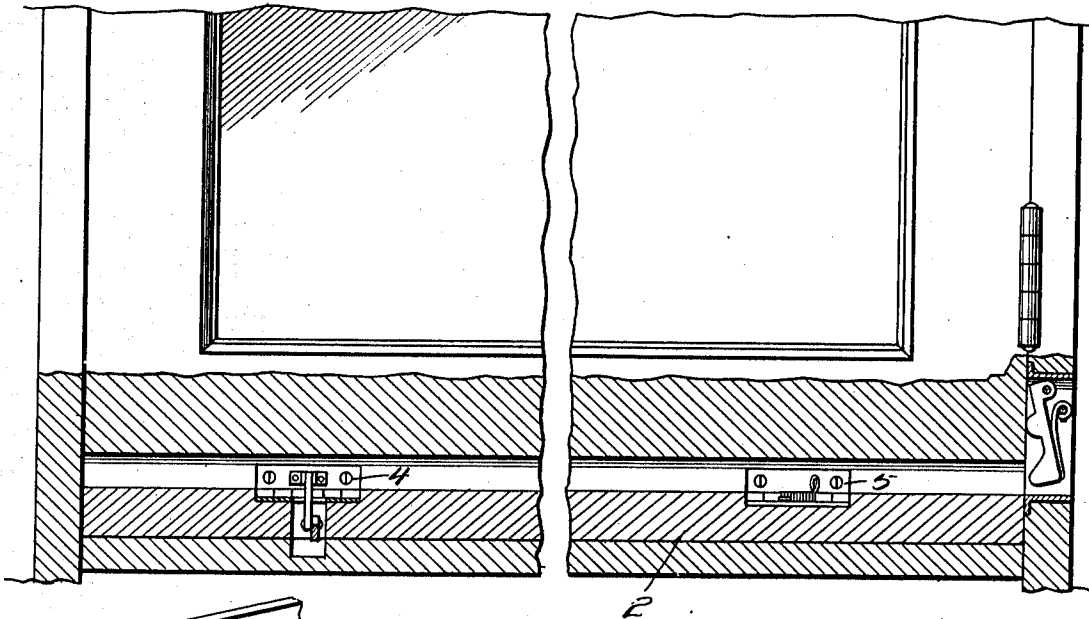


Fig. 7.

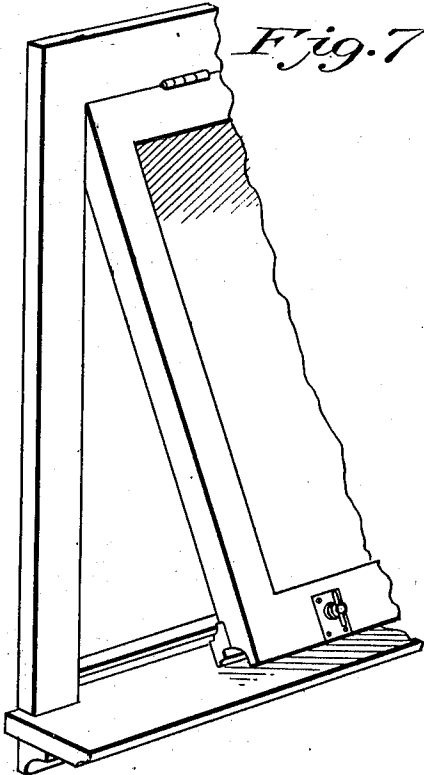
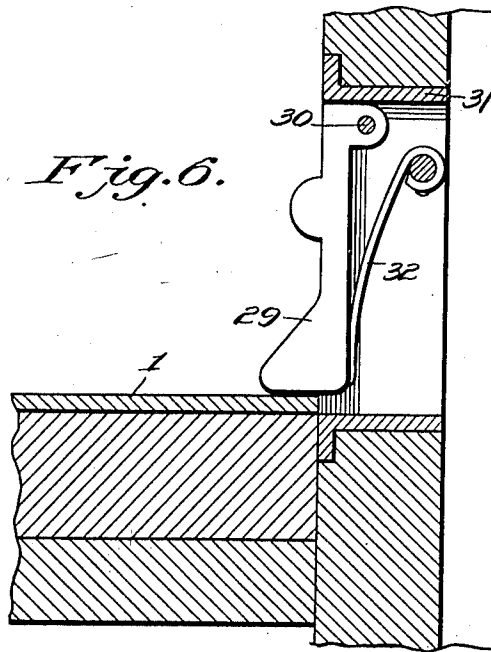


Fig. 6.



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UNITED STATES PATENT OFFICE.

EDWARD S. KELLY, OF ST. LOUIS, MISSOURI.

WEATHER-GUARD AND SASH-LOCK.

982,828.

Specification of Letters Patent.

Patented Jan. 31, 1911.

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To all whom it may concern:

Be it known that I, EDWARD S. KELLY, a citizen of the United States, residing at St. Louis, State of Missouri, have invented new and useful Improvements in Weather-Guards and Sash-Locks, of which the following is a specification.

The invention relates to a combined weather guard and sash lock designed to be used in connection with a swinging sash and operative to effectively close the juncture of the sash and frame against the elements and at the same time lock the sash against opening.

The main object of the present invention is the provision of a weather guard movably mounted on the window frame and arranged to engage a bearing strip carried by the sash, the guard being adapted for manual operation to closed position and to be actuated through an intermediate part serving to lock the sash against movement.

The invention in its preferred details of construction will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a vertical sectional view, partly in elevation, illustrating the improvement, the weather guard being shown open. Fig. 2 is a similar view with the guard shown closed. Fig. 3 is an elevation of the operating member. Fig. 4 is a section, partly in elevation, of the same. Fig. 5 is a section on line 5—5 of Fig. 2. Fig. 6 is a sectional view, partly in elevation, showing the latch for use with the guard when the same is combined with a sash hinged at one side. Fig. 7 is a broken perspective view showing the improvement applied to a sash hinged at the upper side.

Referring particularly to the accompanying drawings wherein is shown the preferred details of construction, the improved guard comprises a metallic strip 1 preferably co-extensive in length with the width of the sash. A guard is movably mounted on a bed strip 2 seated in a recess 3 formed with the window frame immediately underlying the lower edge of the sash when closed, through the medium of hinges 4 and 5, the latter of which is of the spring type tensioned to normally hold the guard in inoperative position, that is with the relatively

forward portion of the guard strip resting upon the upper edge of the bed strip.

On the forward face the lower rail of the sash is cut out to provide a longitudinal channel 6 in which is seated a sealing member 7 terminating at its lower edge above the upper surface of the guard when in inoperative position, so that the member may freely pass over the guard as the window moves to closed position. In rear of the member 7, the lower forward portion of the rail of the sash is cut out to provide a channel 8 in which the guard has free movement from inoperative to operative position. The upper wall of the channel is rounded on a plane coincident with the sweep of the upper edge of the guard strip, and the member 7 forms, in part, a forward wall for the upper portion of the channel, as at 9, said wall serving as an abutment against which the upper surface of the guard bears when in operative position. The lower edge of the guard is preferably curved to a slight extent, as at 10, and the forward face of the bed strip 2 is formed with a recess 11 to receive said curved edge when the guard is in operative position, all as will be clearly seen in Fig. 2 of the drawings.

Immediately in rear of the bed strip 2 the frame or sill is formed with an opening 13 to receive a socket 14, the upper end of which is open and flush with the upper surface of the frame. A pin 15 is slidably mounted in the frame being provided with a head 16 and normally held at its limit of upward movement by a spring 17. The socket, in its relatively forward portion, is provided with spaced ears 18 arranged as opposing walls of the opening in the socket, between which ears is pivoted a lever 19. The rear end of the lever is connected to the pin 15, while the forward end is connected through the medium of a link 20 to the hinge 4 of the guard plate. From this construction it will be obvious that when the pin 15 is at its limit of upward movement, under the influence of the spring 17, the forward end of the lever 19 will be lowered and therefore the guard strip drawn to inoperative position, while the reverse arrangement of the pin 15 will project the guard strip to operative position. It is understood that the bed strip 2, as well as the contiguous portion of the sill, is formed with openings to receive the lever

and link, and that the spring 17 combined with the spring of the hinge 5 is sufficient to normally hold the guard plate in inoperative position.

5 A housing 21 is secured in an appropriately formed channel in the sash, said housing being arranged above the socket 14. Slidably mounted in the housing is a pressure rod 22, the lower end of which is designed to operate through the opening 23
10 in the bottom wall of the housing and to align with the head of the pin 15 when the sash is closed. The upper end of the rod 22 is formed to provide a rectangular head 24
15 having laterally extending flanges 25 at the top and bottom edges thereof, the proximate surface of said flanges being curved. A shaft 26 is revolvably supported in the flange and rear walls of the housing, being provided within the housing with a cam member 27 having its edges normally in contact
20 with the proximate edges of the flanges 25. The cam is so mounted on the shaft that in the rotation of the latter the rod 22 may be reciprocated to depress and to permit elevation of the pin 15. One end of the shaft 26
25 projects beyond the forward wall of the housing and is provided with an operating handle 28.

30 In operation, with the parts in normal position as previously noted, the sash is swung into closed position and the handle 28 operated to cause the rod 22 to depress the pin 15 and itself enter the socket 14.
35 This movement of the pin serves to elevate the guard strip into binding contact with the sealing member 7, at the same time the rod 22 serves to lock the sash against opening.

40 The guard operates to effectively prevent entrance of any material between the sash and frame when the former is in closed position forming an effective seal of the juncture. At the same time the movement of
45 the guard to operative position through actuation of the locking pin 22 serves to lock the sash against opening.

The invention is adapted for use with a sash being hingedly connected with the
50 frame at the top or side, the use in both forms being identical, except that in the sash hinged at the side I prefer means for normally holding the plate in inoperative position while the sash is open in order to
55 prevent any possibility of interference in the closing of the sash. This means is particularly illustrated in Figs. 5 and 6 in which 29 represents a latch pivotally mounted at
60 in a casing 31 seated in an opening in the window frame, a spring 32 being arranged to normally hold the latch in projected position. The latch is mounted at the sash connected face of the frame and while the sash
65 is open the lower edge of the latch overlies the guard strip 1 to prevent upward move-

ment thereof. As the sash moves to closed position it will engage and force the latch to an inoperative position so as to free the guard for operation, the latch being wholly displaced only when the sash is fully closed.

Having thus described the invention, what I claim as new is:—

1. The combination with a swinging sash of a guard plate movably connected to the frame and adapted to close the space between the sash and frame, means mounted in the frame and connected with the guard, and a locking pin carried by the sash and adapted in operation to actuate said means, said pin serving to lock the sash against opening.

2. The combination with a swinging sash of a guard plate to close the opening between the sash and the frame, a spring pressed pin mounted in the frame in rear of the guard plate, a lever operated by said pin, a link connecting said lever and plate whereby in the depression of the pin the plate is moved to operative position, and a pin carried by the sash and designed to align with the spring pressed pin when the sash is closed whereby to permit manual operation of the guard plate.

3. The combination with a swinging sash of a guard plate to close the opening between the sash and the frame, a spring pressed pin mounted in the frame in rear of the guard plate, a lever operated by said pin, the link connecting said lever and plate whereby in the depression of the pin the plate is moved to operative position, and a locking pin carried by the sash and designed to align with the spring pressed pin when the sash is closed whereby to permit manual operation of the guard plate, said locking pin when operated to actuate the spring pressed pin being designed to seat in the recess of the frame to lock the sash against opening.

4. The combination with an element mounted for swinging in a frame, said element being formed with a channel, said frame being formed with a recess, a strip secured in the recess to project beyond the proximate surface of the frame, and a sealing member secured to the element to form an abutment for the forward edge of the channel, of a guard plate hinged to the strip and means whereby said plate may be operated to cause it to engage the strip and sealing member, the forward face of the strip adjacent the surface of the frame being formed with a recess and the lower edge of the guard plate being curved to seat in said recess when the plate is in contact with the sealing member.

5. The combination with an element mounted for swinging movement in the frame, of a guard strip arranged to close the opening between the sash and frame, actu-

ating means for the strip mounted in the
frame, and means carried by the element to
engage and operate said actuating means,
that portion of the operating means ar-
5 ranged to engage the actuating means serv-
ing, when in position, to lock the element
against movement with relation to the
frame.

In testimony whereof I affix my signature
in presence of two witnesses.

EDWARD S. KELLY.

Witnesses:

JAMES WM. RAY,
JOHN CONER.