

No. 619,865.

Patented Feb. 21, 1899.

A. J. COLLAR.
WINDOW FLY ESCAPE.

(Application filed May 11, 1898.)

(No Model.)

Fig. 1.

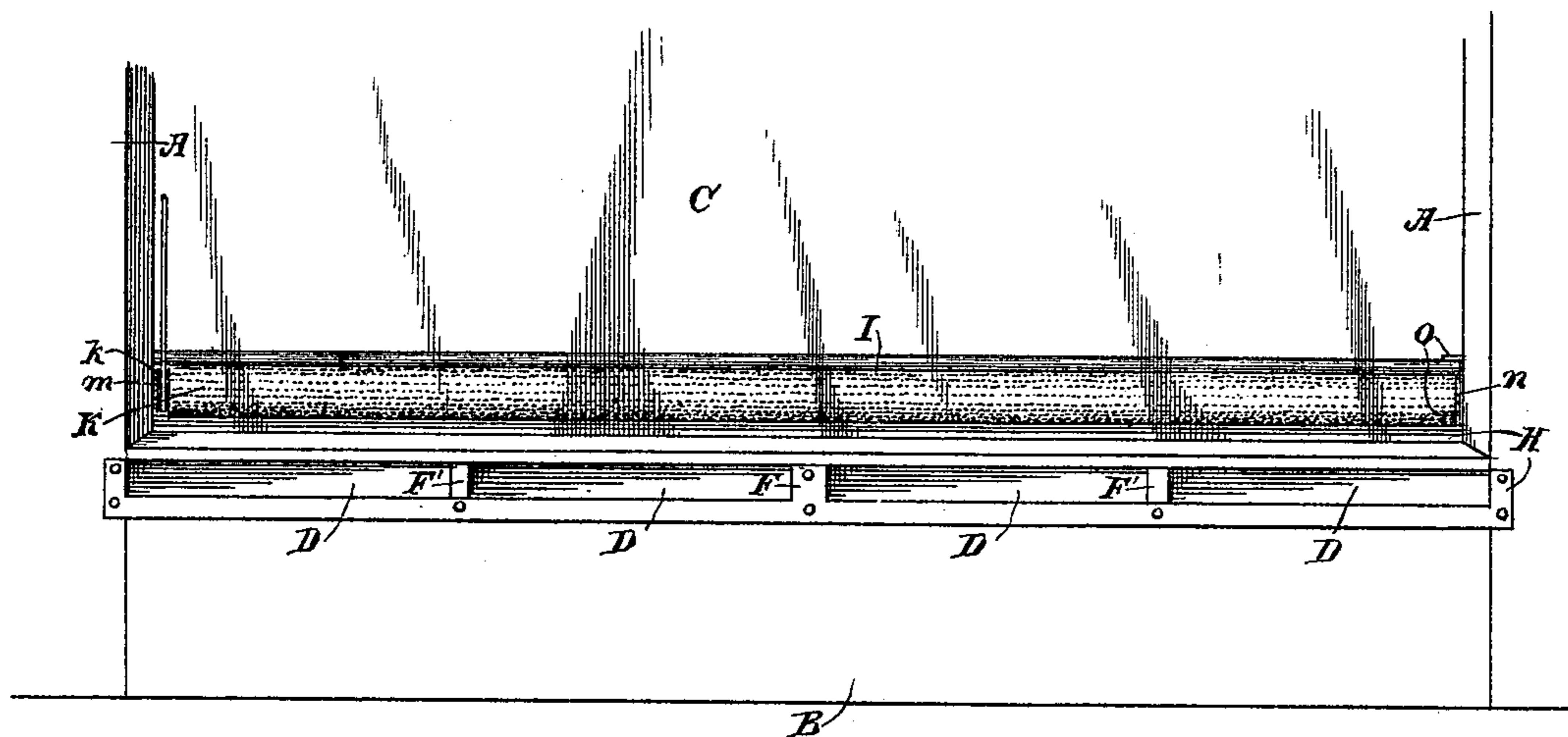
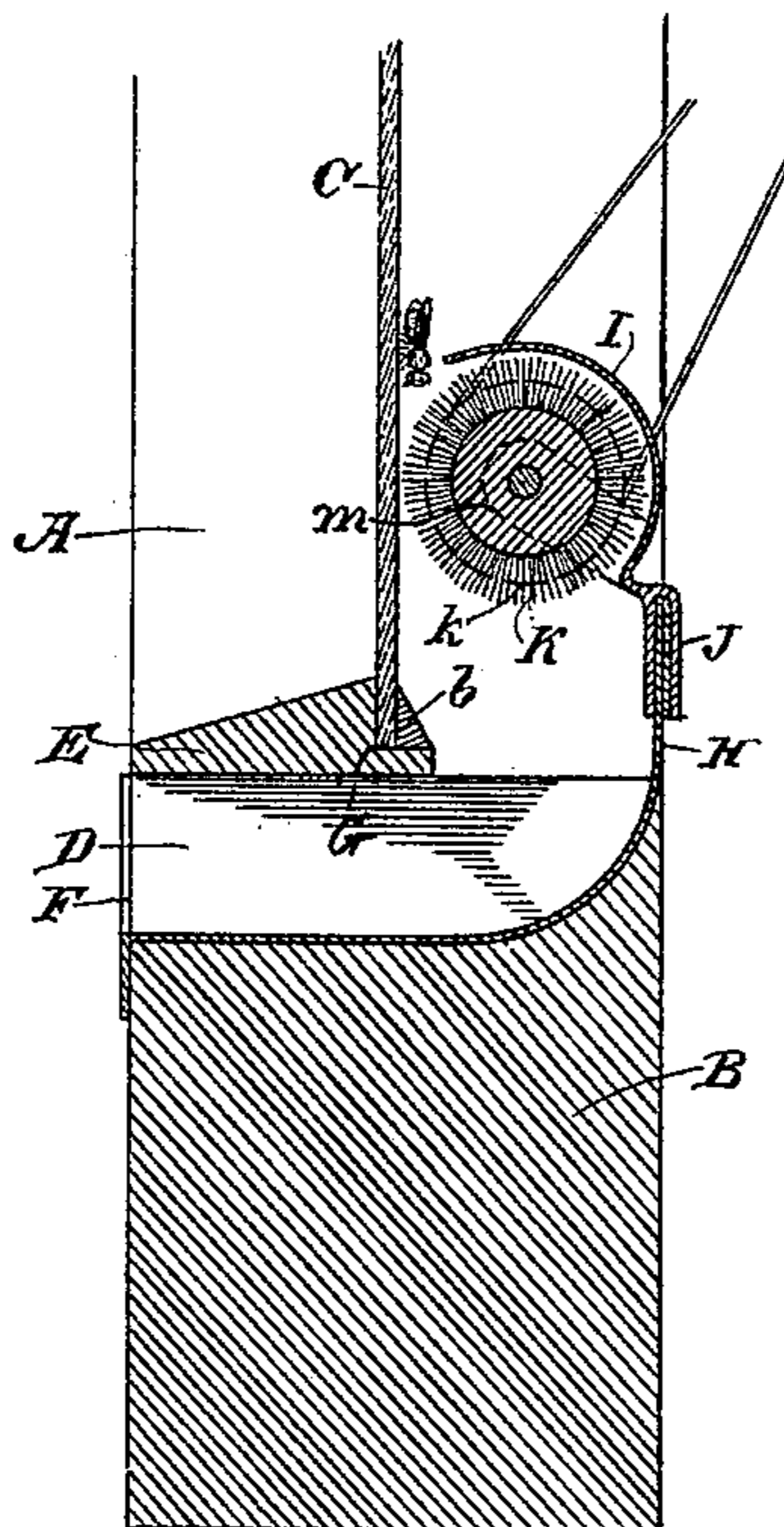


Fig. 2.

Witnesses,
J. F. Ascheck

Inventor,
Adoniram J. Collar
By Duway Strong & Co.
attys

UNITED STATES PATENT OFFICE.

ADONIRAM J. COLLAR, OF YREKA, CALIFORNIA.

WINDOW FLY-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 619,865, dated February 21, 1899.

Application filed May 11, 1898. Serial No. 680,330. (No model.)

To all whom it may concern:

Be it known that I, ADONIRAM J. COLLAR, a citizen of the United States, residing at Yreka, county of Siskiyou, State of California, have invented an Improvement in Window Fly-Escapes; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device and attachment for windows for the purpose of permitting and assisting the escape of flies from the interior of the room to the outside.

It consists, essentially, in the novel construction of a horizontally-disposed channel or channels formed in the bottom rail of the sash and beneath the glass, a smooth lining fitted therein, and a shield and revolving roller contained in the shield having a periphery of light hair, fur, or felt, which contacts with the glass and assists in carrying the insects down into the channel beneath.

The invention also consists in details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a transverse section of my device. Fig. 2 is a view of my device from the outside.

My present invention is an improvement on apparatus for which Letters Patent were issued to me January 4, 1898, No. 596,805.

A A are the side rails, and B the bottom rail, of a window-sash, in which the glass C is fixed.

In carrying out my improvement it is desirable to have a sufficiently-rigid support for the lower edge of the glass without the employment of supplemental strips or pieces. I therefore cut through the sash just below the edge of the glass, forming horizontal channels D, and leaving a portion of the top of the bottom rail of the sash intact, as shown at E. I also leave at intervals pillars F between the slots, these pillars and the upper uncut portion of the sash-rail B thus remaining as an integral part of the sash, which gives them a certain solidity and permanence without the necessity of any supplemental fastenings or attachments. The exterior stop G, against which the glass rests, also remains

upon the sash-rail; but on the inside I cut the top of the rail B away in a beveled form, as shown at b, so that its upper edge is practically a continuation of the surface of the glass, or the putty by which the glass is held in place may form this incline or bevel, the object of this being to provide for the escape of flies and other such insects without any obstruction or stop against which they are apt to lodge and over which they would not ordinarily climb in order to pass downward if it was necessary to pass over an angular projection. By this construction and a comparatively continuous surface from the glass downward the insects will eventually settle down until they arrive opposite the channels or openings, through which they can escape outwardly.

The bottom of the opening is preferably lined with a curved sheet of metal, such as aluminium, the outer portion being essentially horizontal and the inner part curving upwardly, as shown, to a height slightly above the lower edge of the glass. Upon this upturned edge of the plate H is fitted a shield I. The shield is here shown as being semi-cylindrical in shape, having clamps J, by which it may be easily attached to the upper edge of the plate H and as easily removed when desired. The upper edge of this shield approaches nearly to the glass, leaving a sufficient space between it and the glass for the passage of insects downward. Within this shield is journaled a roller K, made of any light material—such as aluminium, paper, papier-mâché, or other suitable material—and the surface of this roller may be covered with felt, fur, or fine light hair projecting outwardly sufficiently to approximately fill the interior of the shield and to lightly touch the inner surface of the glass. At the end of this roller is a pinion, pulley, or other driving device k, and this is designed to be engaged by a corresponding means by which it may be rotated, such as a gear from a spring-actuated clockwork, or if a pulley is used it may be driven by a cord from a corresponding pulley, or the device may be actuated, if desired, by a small electric motor, the object in any case being to revolve the roller at a slow rate

of speed, so that the ends of the fur or other material will lightly brush the pane of glass, moving downwardly on that side.

The operation of this device will be to entangle the flies or other insects when they reach the bottom of the glass, as they always do in their efforts after reaching it, and they will then be swept downward into the channel beneath, and thence escape outwardly.

The cylinder, with its coating, prevents the return of any insects, as it approximately fills the shield in which it rotates, and it also serves to prevent the ingress of dust or any strong current of air.

The shield is easily removable at any time, and the opening may be entirely closed, if desired, by a light strip of material fitted thereto. I design to make the shields of any desired length without reference to the particular windows to which they may be applied.

The journal *m* at one end is permanently formed with or fixed to that end of the shield. The opposite journal *n* is formed upon a plate having clamps or catches *o*, which may be at any time attached to that end of the shield. This enables me to remove this device and to cut the shields to a desired length for the window to which they are to be applied and the journal is afterward fitted to the shield. The roller is in the same manner made to fit the position it is to occupy.

The device is easily applied to any window already completed by cutting the channels in the sash and making the attachments, as previously described.

If the channels *D* have been cut too long, or if the support for the glass is not sufficient, intermediate locks *F'* may be inserted and secured by nailing after the bottom lining has been placed.

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

1. In a window-sash, the lower rail having horizontal channels cut through it below the lower edge of the glass leaving an integral surface and stop at the top of the rail upon

which the glass rests, and pillars formed intermediate between the slots and integral with the sash-rail.

2. In a window-sash, a lower sash-rail having horizontal channels cut through it with an integral top of the rail and stop for the glass and pillars intermediate between the channels left integral with the sash, a segmental metallic lining fitting the bottom of the channels and a beveled surface interior to the plane of the glass whereby an essentially-smooth continuation of the lower edge of the glass is left opening into the channels.

3. In a window-sash, the lower rail having horizontal channels cut therethrough below the bottom of the glass, leaving a continuous support for the glass and pillars intermediate between the channels integral with the bottom rail, a segmental lining fitting the bottom of the channels and curving upwardly against the vertical side rails of the sash, a shield removably fitted to the upper edge of said plate and a roller journaled in said shield having a periphery of filaments which contact with the glass and essentially fill the interior of the shield.

4. A window-sash having channels cut through the lower rail with intermediate supports, a metallic lining for the bottom of said channels, curving upwardly interior to the glass on the inside so as to form a vertical continuation with the horizontal channels, a segmental shield detachably fixed to the upper edge of said plate, a roller journaled within said shield having a periphery of light filaments which approximately fill the interior of the shield and contact with the inner surface of the glass and a means whereby said roller is continuously rotated with its periphery moving downwardly against the glass.

In witness whereof I have hereunto set my hand.

ADONIRAM J. COLLAR.

Witnesses:

GEO. D. BUTLER,
J. M. O'NEILL.