No. 898,281. PATENTED SEPT. 8, 1908.

G. W. STEIN.

FLY ESCAPE.

APPLICATION FILED NOV. 26, 1907.

Fig. 1.

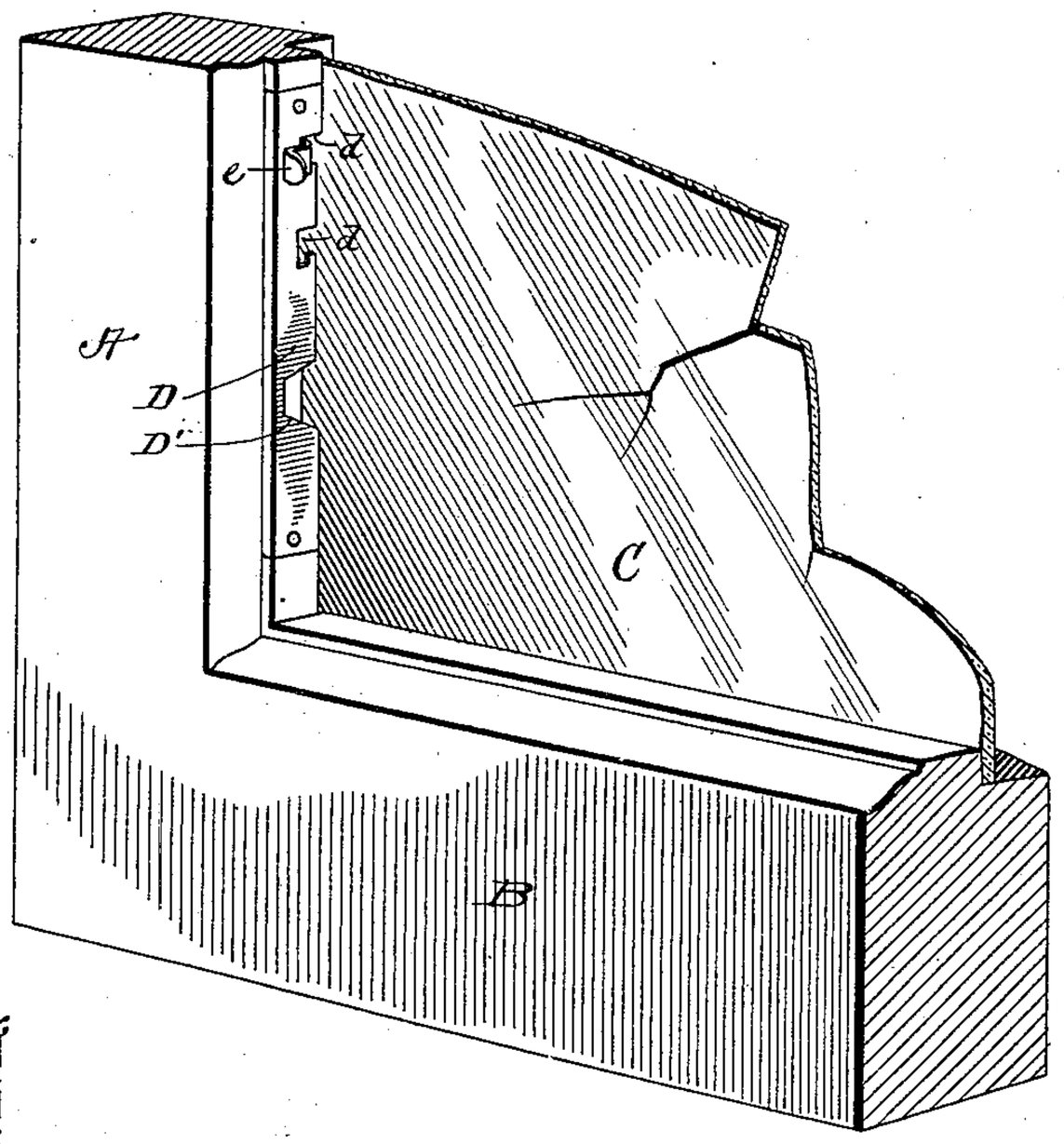


Fig. 3.

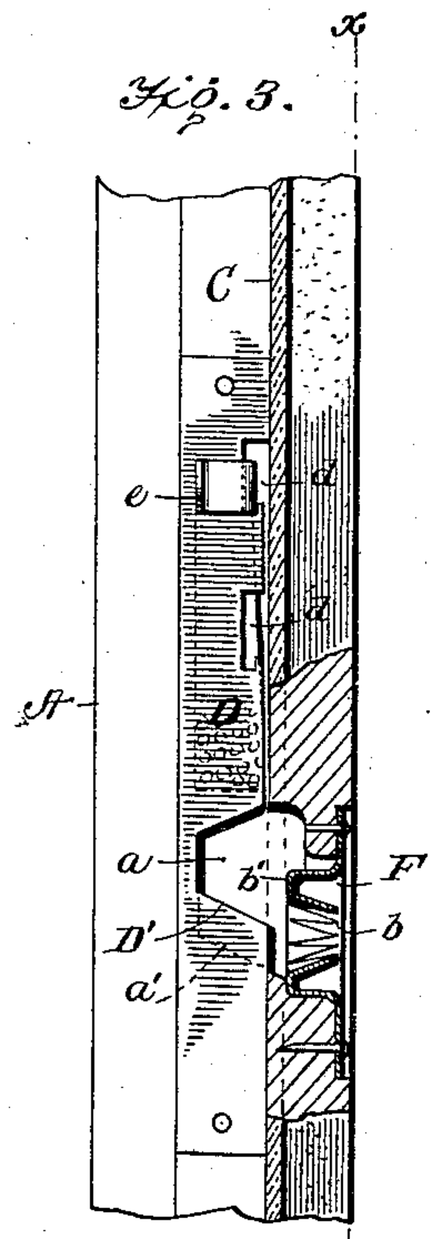


Fig. 4.

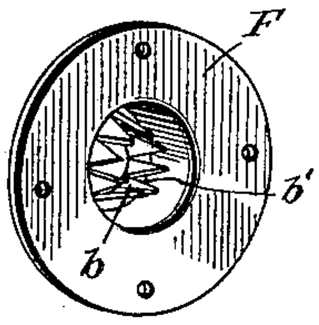
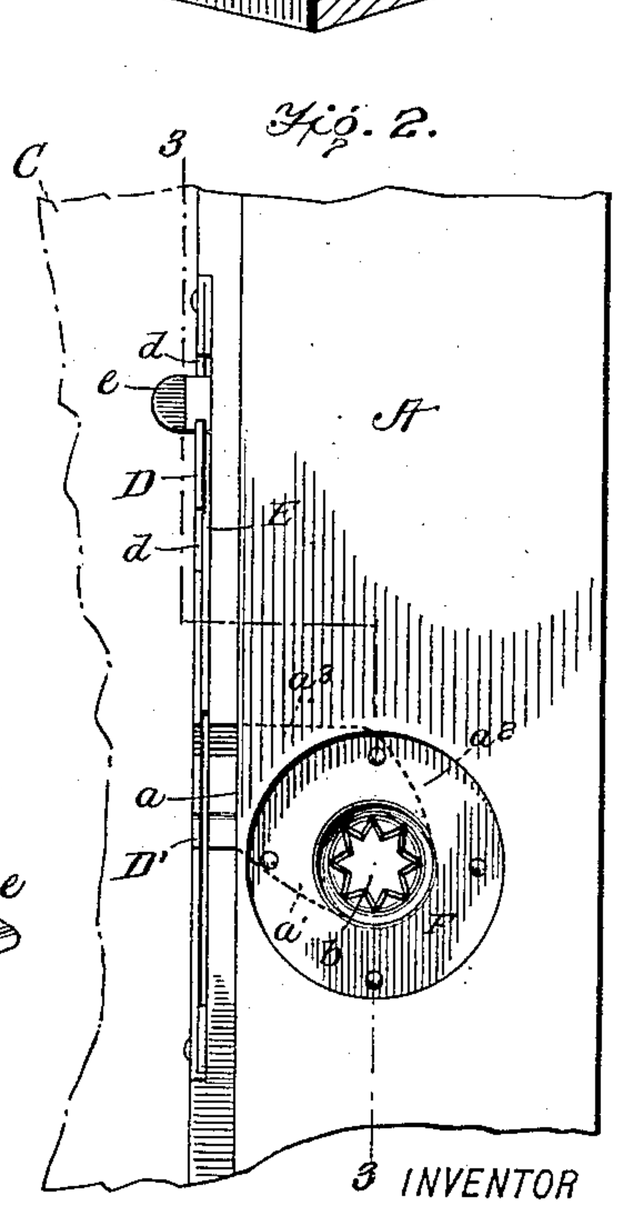


Fig. 5.

Fig. 2.



WITNESSES

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FLY-ESCAPE.

No. 898,281. Specification of Letters Patent. Patented Sept. 8, 1908.

Application filed November 26, 1907. Serial No. 403,873.

To all whom it may concern:

Be it known that I, GEORGE W. STEIN, a citizen of the United States, and resident of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Fly-Escapes, of which the following is a specification.

My invention relates to fly escapes for permitting the egress of flies from the interior of a window, where they naturally congregate, to the exterior, the same devices to be also employed for purposes of ventilation.

My invention consists in the novel construction and arrangement of parts designed with reference to simplifying and cheapening the device, and for making its application to the sash easier and also for preventing its application from interfering with the free sliding of one sash over the other in hoisting the window.

Figure 1 is a perspective view of the interior of a portion of a sash having my invention applied. Fig. 2 is a view taken from the outside of the sash. Fig. 3 is a vertical section taken on line 3—3 of Fig. 2 showing the outer portion of the side bar and glass pane in section and the inner portion of the side bar in elevation. Fig. 4 is a detail in perspective of the plate bearing the escape orifice which is placed on the outside of the sash, and Fig. 5 is a detail in perspective of the cut-off slide or gate.

In the drawing A represents the side bar and B the bottom bar of a lower window sash, and C is the glass pane.

In the inner edge of either sash and either in the side or bottom bar is formed a recess which extends from a point inside the plane of the window pane to a point outside of the plane, forming a passageway around the edge of the glass pane. This recess is shown at *a* in Fig. 3 and extends into the sash bar with an enlarged opening shown at the dotted lines a' a^2 a^3 in Fig. 2, the lower part a' being somewhat lower than the entrance point *a*, to prevent rain and snow from passing up into the room through the opening *a*.

On the inner side of the glass pane and secured by tacks or screws to the sash is fixed a closure plate D of sheet metal having an opening D′ in its edge next to the glass pane. This closure plate D also has along the edge adjacent to the glass pane two or more undercut notches *d*, *d* adapted to receive an interlocking hook *e* formed on the end of the gate or slide E, seen in detail in Fig. 5. This gate has an imperforate portion e' and a perforated portion e^2 and the gate is arranged to slide between the closure plate D and the wooden bar of the sash and to have its hook *e* adjusted in either of the notches *d d*. When adjusted in the upper notch *d*, as in Fig. 3, the outlet *a* for the flies is entirely open. When adjusted in the lower notch *d*, the perforated end e^2 is brought across the opening *a*, so as to partially close it but still allow some ventilation through the perforations, or the gate may be dropped entirely down to allow its imperforate portion e' to come over the opening *a* to entirely close it, as might be desirable in very cold wintry weather or during a driving snow storm. I make no claim to the closure plate and gate in this case as the same is covered in another copending application filed August 21, 1907. Serial Number 389,495, allowed November 6, 1907.

The principal feature of novelty in the present invention is to be found in the external attachment to the sash. This consists of a plate F, seen in detail in Fig. 4 and which may be either round as shown, or any other desired shape, although I prefer to make it round for the reasons that it is more easily fitted to place and makes a better finish. This plate is stamped on a die to form a deep circular depression b' and the inner edges of the depressed portion are bent reversely so as to trend outwardly and are formed into numerous converging pointed prongs *b* which together form a tapered outlet through which the flies may pass from the inner side to the outer side, but cannot return. In striking up the plate F the points of the prongs *b* are made to lie inside of the plane of the peripheral flange, *i. e.* the face plane of the plate, so that they do not extend beyond the plane of the line *x*—*x* in Fig. 3, and consequently the adjacent sash may play freely up and down on the outer side of the plate E without touching the prongs. This exit plate is of very simple construction and very simple application, since it is simply tacked or screwed in place on a shallow circular recess on the outside of the sash bar over the enlarged recess a' a^2 a^3 in the same which constitutes a very simple and practical means of application. The pronged and tapered outlet orifice of the plate is placed at the bottom level of the recess a' a^2 a^3 so that water cannot rise up the incline a' to enter the room.

The fly escape here described comprises

only three pieces, which are cheaply made and easily applied and form a simple and practical means for securing the egress of the flies and is applicable to either the upper or lower sash and to either the vertical or horizontal bars of the same.

I claim:

1. A fly escape consisting of a plate having an indented central recess with its inner edges terminating in reversely turned and tapered prongs whose points lie inside of the face plane of the plate.

2. A fly escape consisting of a plate having an external face flange with holes for attachment, a central recess having a central opening in its bottom and a series of tapering points attached to the edge of the central hole and projecting outwardly toward the face flange but lying inside the plane of the same.

3. A fly escape consisting of a single piece of metal formed as a plate with a circular external face flange having holes for attachment, and an indented central recess inside the face flange provided with a central hole, and a series of tapering prongs integral with the edges of the central hole and converging outwardly toward the face flange but lying inside the plane of the same.

GEORGE W. STEIN.

Witnesses:
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