No. 877,250. PATENTED JAN. 21, 1908.

G. W. STEIN.

FLY ESCAPE.

APPLICATION FILED APR. 1, 1907.

Fig. 1.

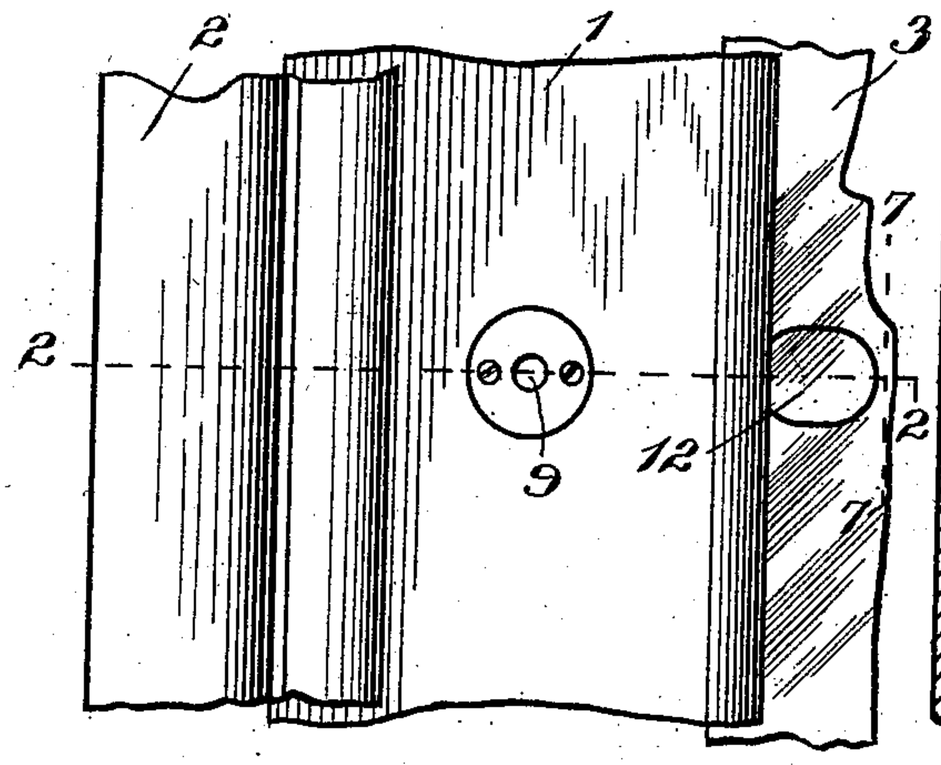


Fig. 2.

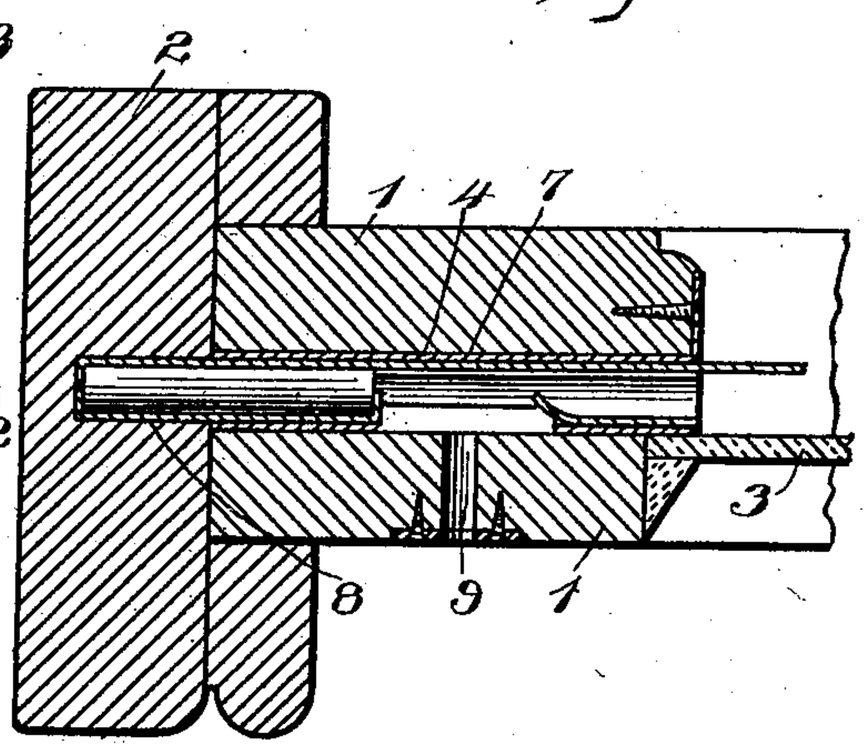


Fig. 3.

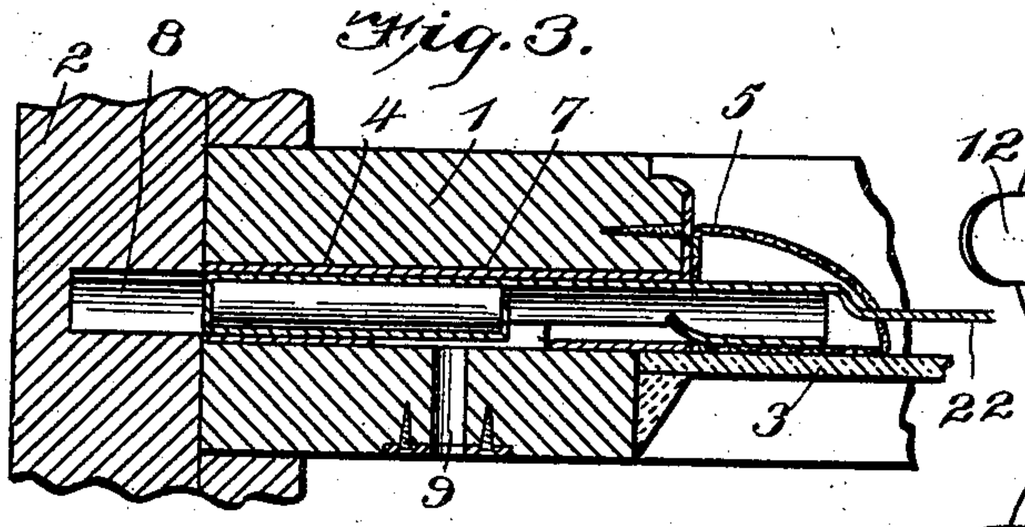


Fig. 4.

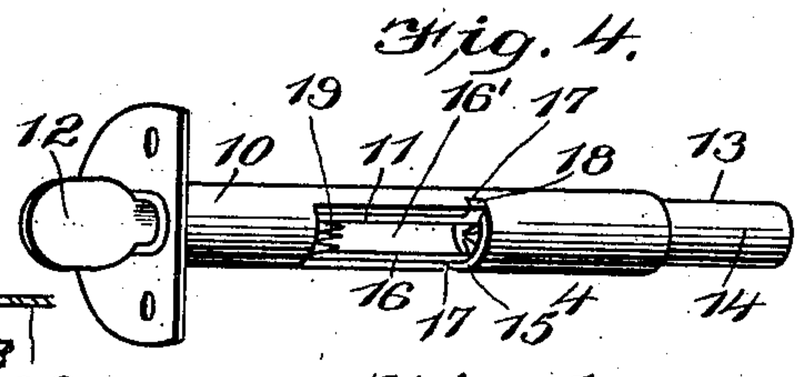


Fig. 5.

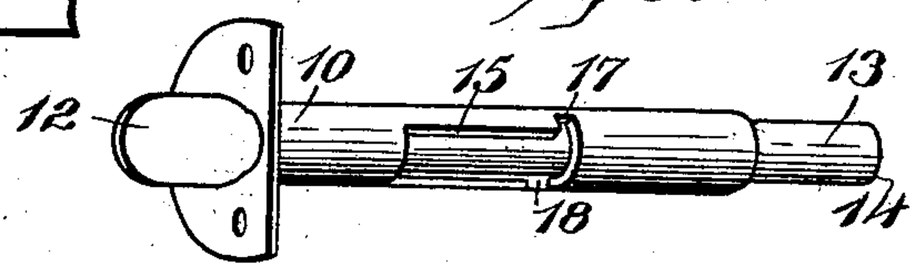


Fig. 6.

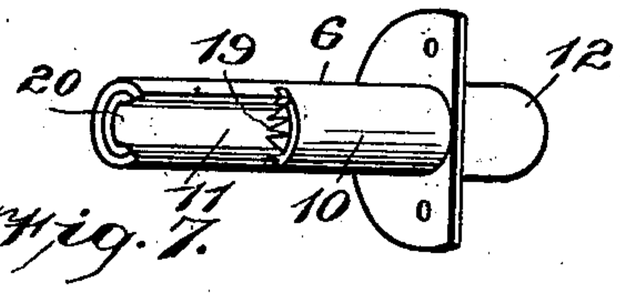


Fig. 7.

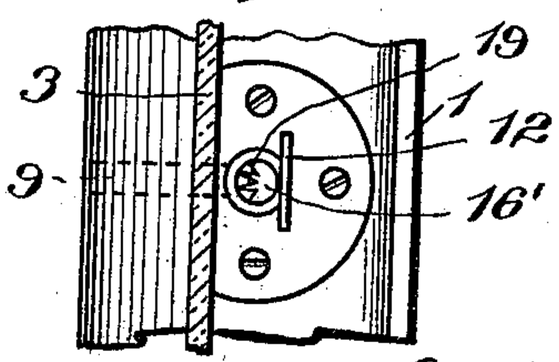
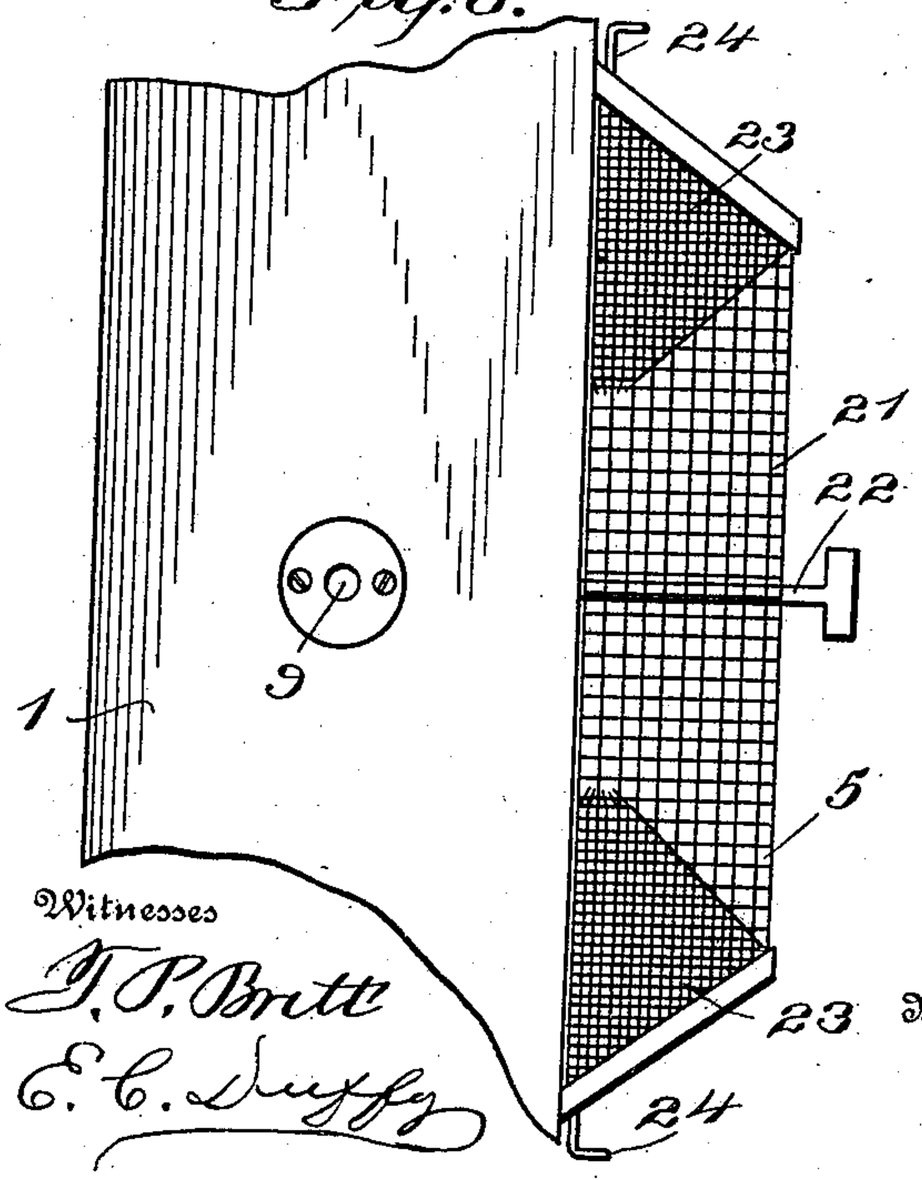


Fig. 8.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE WILLIAM STEIN, OF WASHINGTON, DISTRICT OF COLUMBIA.

FLY-ESCAPE.

No. 877,250. Specification of Letters Patent. Patented Jan. 21, 1908.

Application filed April 1, 1907. Serial No. 365,669.

To all whom it may concern:

Be it known that I, GEORGE WILLIAM STEIN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Fly-Escapes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to a fly escape and also to a combined sash bolt or lock and fly escape, and my invention has for its object to provide a simple means for allowing flies to freely escape from the interior of a room, store or dwelling, but which will not allow ingress of flies to the interior of the rooms, stores or dwellings.

It is a well known fact that flies within a room congregate about the windows and particularly around window panes adjacent the window sash, and I utilize this fact in accomplishing escape of the flies.

My invention also consists in providing a sash lock or bolt in the window sash and arranging the same in such manner that the said bolt or lock can be utilized as an escape or as a means of egress of the flies on the inside of the window pane.

With these objects in view my invention consists in the novel construction of the fly escape; and my invention also consists in the novel construction of the combined sash bolt and fly escape.

My invention also consists in certain other novel details of construction and in combinations of parts, all of which will be first fully described and afterwards specifically pointed out in the appended claims.

Referring to the accompanying drawing: Figure 1 is an elevation of a portion of the window sash and frame showing my fly escape attached thereto. Fig. 2 is a transverse sectional view taken on line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view showing sash bolt and fly escape in position when not in use and also illustrating the fly trap in transverse section. Fig. 4 is a perspective view of the combined sash bolt and fly escape showing same in position for allowing the free egress of flies. Fig. 5 is a similar view showing the device in position for preventing the egress of flies. Fig. 6 is a perspective view of the fly escape without the sash bolt. Fig. 7 is a vertical sectional view taken on dotted line 7—7 of Fig. 1, and Fig. 8 is an elevation showing window sash together with fly escape and trap arranged thereon.

Like numerals of reference indicate the same parts throughout the several figures in which:

1 indicates the window sash, 2 the window frame, 3 the window pane, 4 the combined sash bolt and fly escape, 5 the fly trap and 6 the fly escape without the sash bolt thereon.

Referring to Figs. 2 and 3 it will be seen that a longitudinal opening 7 is made through the window sash and a longitudinal hole or socket 8 is provided in the window frame; while a small transverse opening 9 is provided in the outer side of the window sash, said opening 9 communicating with the longitudinal opening 7 in the sash.

Referring now to Figs. 4 and 5 it will be seen that the combined fly escape and sash bolt 4 comprise a tube 10 within which is arranged a rotatable cylinder or barrel portion 11, said cylinder or barrel portion 11 comprising a thumb piece or handle 12 on the inner end thereof; while the outer end 13 is either filled or made solid to form a bolt 14. Referring particularly to Fig. 4 it will be seen that a portion of the tube 10 is cut away at 15, while a portion of the cylinder or barrel 11 is cut away at 16, said cut away portions 15 and 16 coinciding as clearly shown. Thus when the cylinder or barrel 11 is in position shown in Fig. 4 the bore or interior 16′ of said cylinder or barrel communicates with the transverse opening 9 in the sash as clearly shown in Fig. 2.

By rotating the cylinder or barrel 11 by means of the thumb piece 12 the cut away portion 15 in the tube 10 is closed by the cylinder or barrel 11 as clearly shown in Fig. 5, thus cutting off connection between the bore or interior 16′ of the escape and the transverse opening 9 in the sash.

As shown in Figs. 4 and 5 two notches 17 are provided in the tube 10 and a stop 18 is provided on the cylinder or barrel 11 to enter said notches in order to prevent excessive rotation of the cylinder or barrel 11. It will be seen by referring to Fig. 4 and also to Figs. 2, 3 and 7 that a portion of the cylinder or barrel 11 adjacent the cut away portion 16 is formed into teeth 19 bent inwardly in order to reduce the escape at that point and

in order to prevent reëntering of the flies through the escape.

Referring now to Fig. 6 it will be seen that the cylinder or barrel terminates at 20, and does not have a bolt 14 thereon as shown in Figs. 4 and 5, the tube 10 and cylinder or barrel 11 however being the same as before described.

Referring to Fig. 8 and also in this connection to Fig. 3 it will be seen that I provide a trap 21 which is arranged on the window pane and secured to the edge of the sash, and when employing this construction the end of the cylinder or barrel 11 is lengthened to form a stem 22 which extends entirely through the trap 21 so that the escape and sash bolt can be operated from without the trap 21.

The trap 21 is made preferably of a suitable wire screen having cone shaped entrances 23 and handles 24 for removing said entrances as occasion some times requires that the trap be removed from the sash and the entrances 23 withdrawn so that any dead flies may be taken from the trap.

Having thus described the several parts of my invention its operation is as follows:

The combined trap and sash bolt is arranged in the sash as shown in Fig. 3. When it is desired to utilize the fly escape the bolt 14 is pushed into the socket 8 in the sash and turned into position shown in Figs. 2 and 4 which brings the opening 16 in the cylinder or barrel 11 and the opening 15 in the tube 10 together as shown in Figs. 2 and 4; thus allowing the bore or interior 16′ of the cylinder or barrel 11 to communicate with the transverse opening 9 in the window sash. When the device is employed without the trap 21 the flies on the window pane and on the edge of the sash are free to enter the bore or interior 16′ on the cylinder or barrel 11 passing over the turned in teeth 19 and out through the transverse opening 9 in the window sash, thus allowing a ready escape for the flies and a simple and efficient means of egress from the interior of the room. Should it be desired to employ the device as a sash bolt and not as a fly escape the bolt and cylinder or barrel have simply to be turned into position shown in Fig. 5 which cuts off communication of the escape with the transverse opening 9 in the sash.

In employing the device simply as a fly escape and not as a sash bolt the construction shown in Fig. 6 is employed which is the same as just described with the exception of the bolt.

When employing the device in combination with the trap 21 the said trap is secured in position as shown in Figs. 3 and 8 and flies enter the trap through the entrances 23 and thence into the bore or interior 16 of the barrel or cylinder 11 and out through the transverse opening 9 in the sash.

It is also evident that this device acts as a small ventilator.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:—

1. A fly escape of the character described comprising a window sash bolt, a bore or passage in said bolt and a transverse passage in the window sash communicating with the said bore or passage in said bolt.

2. A fly escape of the character described comprising a barrel portion arranged longitudinally in a window sash, a transverse passage or opening in the sash communicating with a barrel portion and a tube within said barrel portion for cutting off communication between said barrel portion and said transverse passage or opening.

3. A fly escape of the character described comprising a stationary portion arranged to be inserted in a window sash, a bore or passage in said portion, an opening in said portion arranged to communicate with an opening or passage in the sash.

4. A fly escape comprising a sash bolt and a bore or passage in said bolt.

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

GEORGE WILLIAM STEIN.

Witnesses:
GEO. S. LIVINGSTON,
C. HUGH DUFFY.