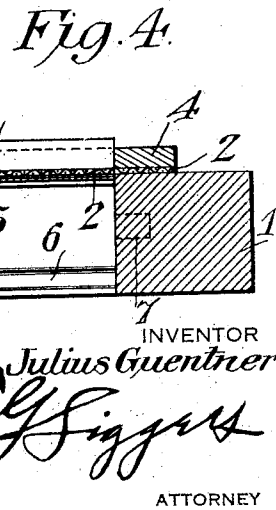
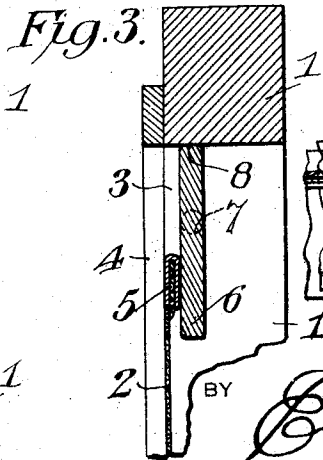
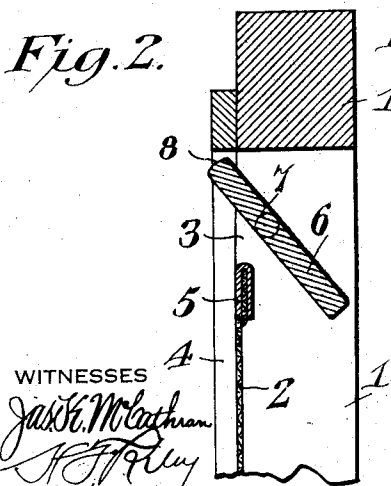
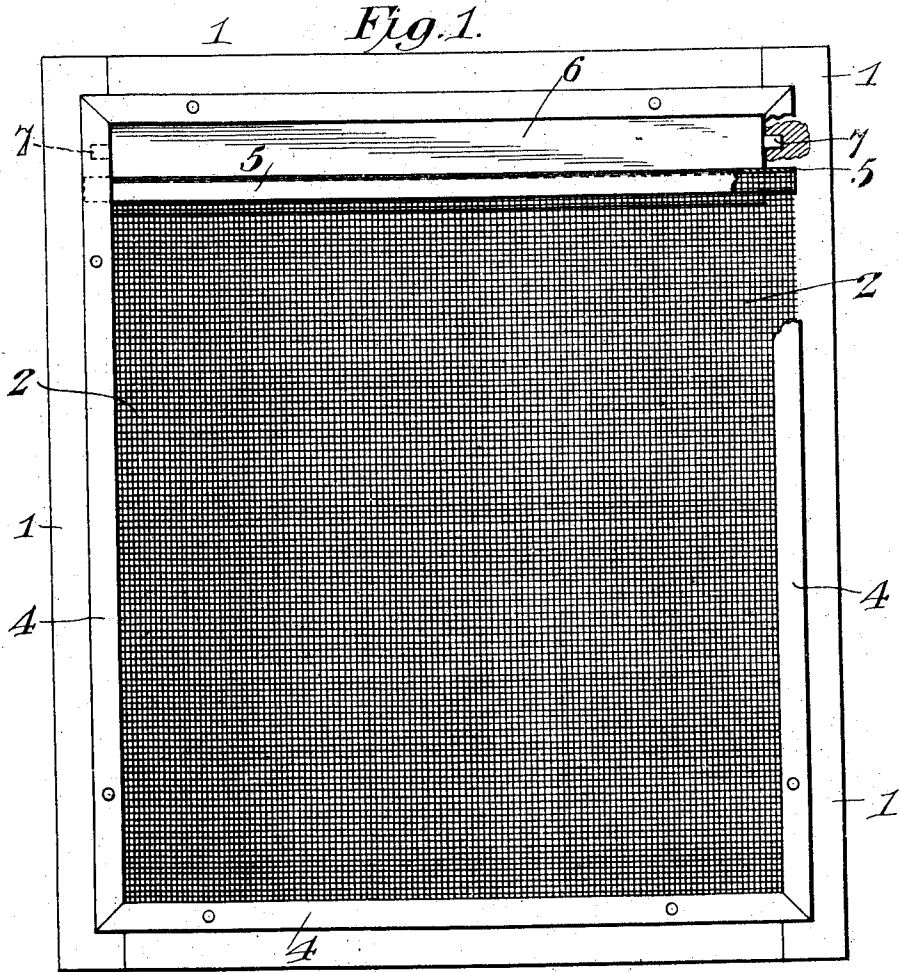


J. GUENTNER.
SCREEN.

APPLICATION FILED JULY 21, 1910.

982,270.

Patented Jan. 24, 1911.



UNITED STATES PATENT OFFICE.

JULIUS GUENTNER, OF MILWAUKEE, WISCONSIN.

SCREEN.

982,270.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed July 21, 1910. Serial No. 573,140.

To all whom it may concern:

Be it known that I, JULIUS GUENTNER, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Screen, of which the following is a specification.

The invention relates to improvements in screens for doors, windows, etc.

10 The object of the present invention is to improve the construction of screens, and to provide a simple, efficient and comparatively inexpensive one of great strength and durability, designed for use at doors, windows and other places, and equipped with an efficient fly escape, adapted to permit flies and other insects to crawl outward from the inner face of the screen, and capable of effectually preventing them passing from the exterior to the interior.

20 It is also the object of the invention to provide a fly escape of this character, capable of being tightly closed at night to prevent the entrance of mosquitos and other insects.

25 With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

30 In the drawing:—Figure 1 is an elevation of a window screen, constructed in accordance with this invention, and partly broken away at one end of the fly escape to illustrate the construction thereof. Fig. 2 is an enlarged vertical sectional view, the pivoted slat or member of the fly escape being arranged at an inclination to provide a passage for the escape of the flies. Fig. 3 is a similar view, the pivoted slat or member being arranged in a vertical position to close the fly escape. Fig. 4 is an enlarged horizontal sectional view of one side of the screen, illustrating the manner of securing the screen material to the screen frame.

35 Like numerals of reference designate corresponding parts in all the figures of the drawing.

40 In the embodiment of the invention illustrated in the accompanying drawing, the fly

escape is applied to a window screen, but the improvements are applicable to screen doors and the like. The screen comprises in its construction a rectangular frame 1 and a sheet 2 of woven wire fabric, or other screen material, stretched tightly over the frame and having its bottom and side edges arranged flat against the bottom and side bars of the frame, the upper edge of the screen material 2 being spaced from the top bar to provide an opening 3 directly above the upper edge of the screen material. The bars of the screen frame are suitably connected at their ends, and the screen material 2 is secured to the bars by strips 4, preferably in the form of molding and tacked or otherwise secured to the bars of the frame at the inner edges thereof. The strips 4, which securely hold the screen material on the frame, also operate to reinforce and strengthen the latter.

45 The upper edge of the screen material is provided with a sheet metal binding strip 5, extending entirely across the space between the side bars of the frame and having its terminals secured between the same and the side strips 4. The binding strip 3 consists of a strip of sheet metal, bent longitudinally to form two sides or flanges between which the upper edge of the screen material is arranged. The metallic binding strip is of increased width, that is, it is of greater width than an ordinary binding strip in order to form an imperforate wall of a fly escape passage in addition to maintaining the upper edge of the screen material perfectly straight to prevent the same from bulging or sagging.

50 The screen is equipped with a pivotally mounted transverse slat or member 6, located at the opening 3 and being of a width considerable in excess of the same, and provided at its ends with suitable pivots 7, mounted in bearing recesses of the side bars of the screen frame 1 adjacent to the top bar thereof, as clearly shown in Fig. 1 of the drawing. The slat or member 6 may be pivoted in any desired manner, and the pivots are located at an intermediate point between the upper and lower edges of the slat 6, which is slightly rounded at the upper edge at 8 in order to clear the top bar of the frame and to enable it to abut against the same, when it is arranged in a vertical position, as illustrated in Fig. 3 of the drawing. In this position, the lower portion of

the slat fits flat against the binding strip, and it extends below the same. The slat in this position covers the opening 3, is close to the fly escape, and effectually prevents mosquitos or other insects from entering through the fly escape during the nighttime. The pivoted slat is also adapted to be arranged in an inclined position, as illustrated in Fig. 2, and its upper portion then extends through the opening 3 and projects outward beyond the plane of the screen material. The lower edge of the slat is located in substantially the plane of the lower edges of the binding strip, when the slat is in an inclined position and the lower portion of the slat is spaced from the binding strip to provide a passage-way for the escape of flies crawling upward on the inner face of the screen. This permits the flies to pass readily out at the top of the screen, and they are directed by the slat through the passage, which is not darkened from the interior, so that there is no interference with the escape of flies or other insects. The sheet metal binding strip forms an imperforate wall for one side of the fly escape and throws a shadow upon the slat, which also is imperforate and adapted to produce a shadow at the fly escape when viewed from the exterior or outer face of the screen. This together with the natural tendency of the flies to crawl upward prevents them from entering through the fly escape passage.

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

A screen including a rectangular frame, a sheet of screen material arranged flat against the frame, said screen being spaced at its

upper edge from the top bar of the frame to define an opening, attaching strips mounted along the frame and securing the bottom and side edges of the screen material to the same, a relatively wide sheet metal binding strip, secured at its ends to the frame by the attaching strips and extending across the screen and embracing and supporting the upper edge thereof, and a transverse slat pivoted intermediately of its upper and lower edges between the sides of the frame and midway of the said opening and being of greater width than the latter and overlapping and fitted flat against the binding strip when the slat is in a vertical position and closing the opening of the screen, said slat being adapted to be swung so as to project through and across the opening beyond the plane of the outside of the screen material in an inclined position, and having its lower portion extending below the upper edge of the binding strip and spaced from the same to provide a fly escape passage from the inside of the screen, said binding strip forming an imperforate smooth wall at the outer side of the bottom of the fly passage and coöperating with the slat to throw a shadow so as to darken the passage from the exterior and prevent insects from entering through the fly escape passage from the outside.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JULIUS GUENTNER.

Witnesses:

EMIL J. ZINGEN,
ROSE EWENS.