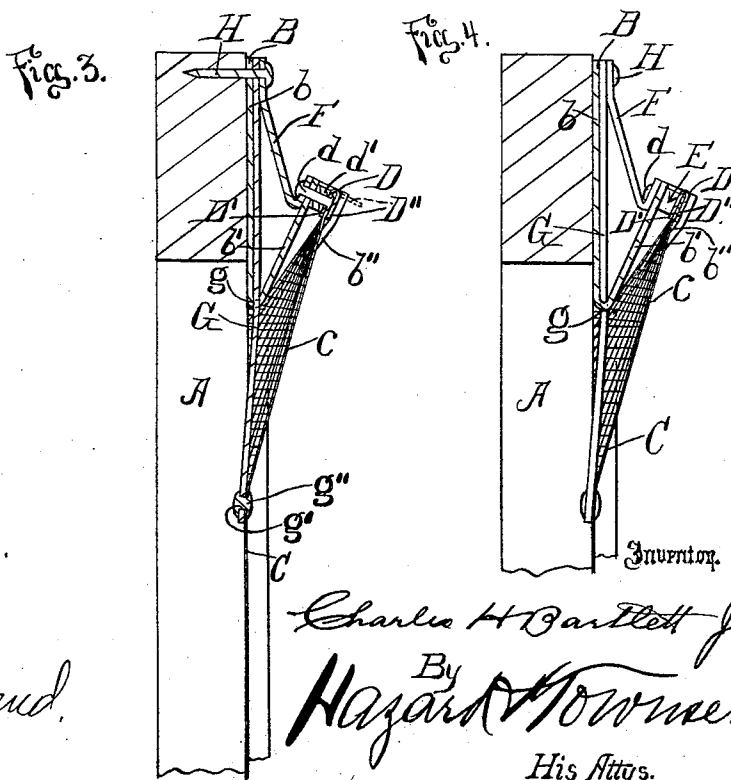
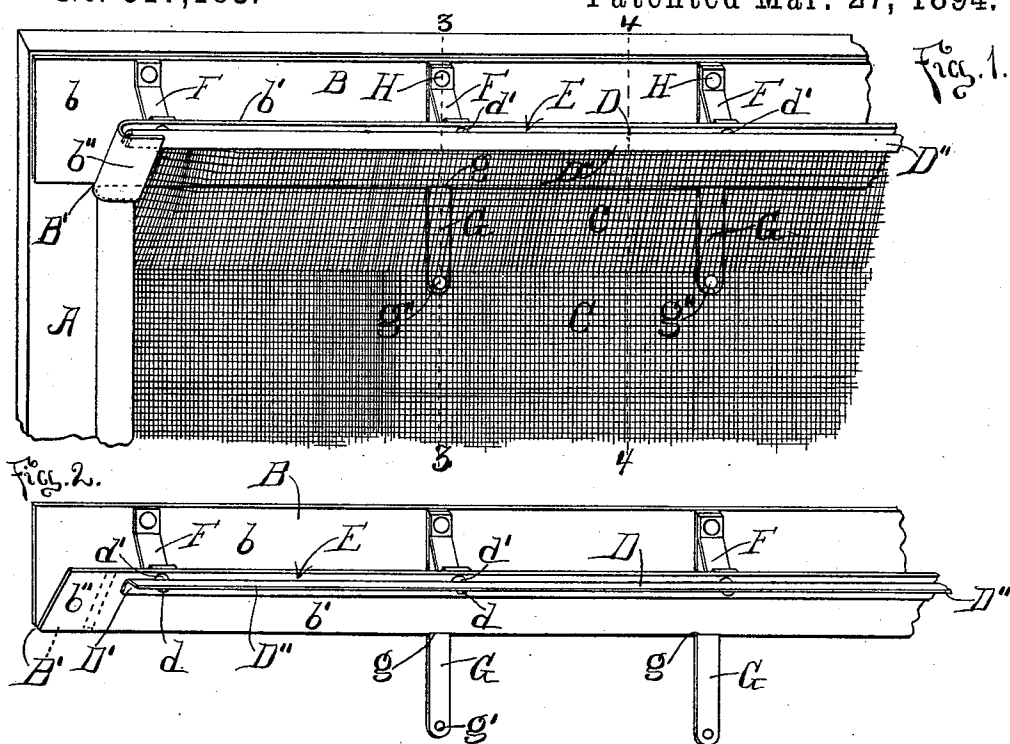


(No Model.)

C. H. BARTLETT, Jr.
WINDOW SCREEN AND ATTACHMENT.

No. 517,183.

Patented Mar. 27, 1894.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES H. BARTLETT, JR., OF POMONA, CALIFORNIA.

WINDOW-SCREEN AND ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 517,183, dated March 27, 1894.

Application filed November 29, 1893. Serial No. 492,396. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BARTLETT, Jr., a citizen of the United States, residing at Pomona, in the county of Los Angeles and State of California, have invented new and useful Improvements in Window-Screens and Attachments Therefor, of which the following is a specification.

My invention relates to those window screens which are provided with an exit arranged to allow the exit of a fly or other insect from a room, and to prevent the entrance of such insect into the room from the outside thereof.

One object of my invention is to provide an improved device of this class.

A further object of my invention is to provide a fly or insect exit attachment for window screens which may be manufactured in quantities independent of the screen frame and may be quickly applied to screens already in place upon a door or window without removing the screen from the frame.

A further object of my invention is to provide improved means whereby the wire screen which is necessarily inclined outward at its top to connect it with the frame of the fly exit, may be held taut and prevented from sagging or drawing out of shape.

The accompanying drawings illustrate my invention.

Figure 1 is a fragmental perspective view of a window-screen provided with my invention. Fig. 2 is a fragmental perspective view of the exit attachment before it is applied upon the screen frame. Fig. 3 is a vertical sectional view indicated by line 3—3, Fig. 1. Fig. 4 is a fragmental sectional detail on line 4—4 Fig. 1.

In the drawings A represents the frame of the screen and B represents a V-shaped sheet metal base consisting of an inner member *b* adapted to be secured to the frame A and an outer member *b'* inclined outward away from the inner member and arranged slanting away from the frame A of the screen C when the base is secured upon the frame in the position shown in Figs. 1 and 3.

D is a metal screen clamp strip which is secured to the outer side of the outer member *b'* of the base, parallel therewith and arranged to form in combination with such member an exit slot E.

In the drawings I have illustrated a convenient and efficient manner of securing the clamping strip to the outer member *b'* of the base so as to leave the exit slot E therebetween. These means consist of the rivets *d* which pass through the strip D and through the outer member *b'* of the base and upon these rivets I arrange the washers *d'* which are interposed between the clamping strip and the outer member of the base and hold such strip and member apart to form the exit slot; this construction is clearly illustrated in Figs. 3 and 4.

It is desirable to use thin metal in the construction of the base B, in order to secure lightness and cheapness. In order to make this base of light metal and still provide a device which will be very rigid in its construction and not liable to be injured or bent out of shape by rough usage, I arrange braces F extending from one member *b* of the base to the other member *b'* near the tops of such members and I secure these braces to the outer member by the rivets *d* which secure the screen clamping strip D and the member *b'* to each other. If heavy metal is used for the base, the braces F may be dispensed with.

I have found in practice that where the screen cloth or wire mesh C is inclined outward at its top to bring it into proper position to be attached to the screen clamping strip D, as shown in Fig. 3, that portion of the screen material wire or cloth C intermediate the sides of the frame is liable to sag and to injure the appearance of the screen as a whole. I have also found that if a bar or rod is placed across the screen below the inclined portion *c* of the screen to support the screen that the screen is prevented from sagging, but that when a fly or other insect walks upward on the screen toward the exit E, when it reaches the cross bar it stops and ordinarily either descends or flies out into the room. In order to avoid this objection and still prevent the screen from sagging I provide a screen supporting strap or a series of straps G which are secured to the frame A or to the inner side of the base B as may be deemed best, and extend downward, passing through the slot *g* provided in the bottom or V of the base. I provide a rivet hole *g'* at the bottom of such strap to receive a rivet *g''* or other suitable

means adapted to secure the supporting strap G to the screen C below the inclined portion of the screen. These straps are arranged along the base at suitable intervals and while supporting the screen and preventing it from sagging they do not interfere with the upward passage of the fly along the screen to the exit. As illustrated in the drawings these straps are secured in place by a nail H which also secures the upper end of the brace F to the inner member *b* of the base and thus performs a triple function of securing the brace, and the strap in position upon the base and of securing the base to the frame.

In practice the exit attachment is manufactured as shown in Fig. 2 ready to be secured in place upon the frame of the screen. Where my invention is to be applied to a wire screen already in place upon a frame, the upper end of the wire screen is loosened from the frame at the top and also upon each side of the frame for a short distance downward from the top thereof; then the base B and the supporting straps G are secured in place upon the frame by nails H as shown in Figs. 1 and 3. The screen clamping strip D which is secured to the base member *b'* by its inner member D' extends outward at practically right angles to its inner member as shown in solid lines in Fig. 2 and dotted lines in Fig. 3, and after the base is secured in place upon the frame the screen C is drawn taut and fastened to the supporting straps G either by the rivets *g''*, as shown or by any other suitable means; then the top of the screen is trimmed to fit snugly beneath the outer member D'' of the clamping strip D and the outer member is then clamped down upon the screen as shown in Figs. 3 and 4; a slit B' is cut in the bottom of the base B at each end thereof and the end *b''* of the outer member *b'* is bent outward over the screen C and the clamping strip D as shown in Fig. 1, thus closing the opening between such outer member and the screen.

In practice the flies light upon the screen and crawl upward thereupon and find a ready exit through the exit slot E. By reason of the V-shape of the base the liability of the insect finding the exit slot E when seeking an entrance into the house is greatly lessened in that unless the insect alights directly upon the top of the clamping strip D' of the outer member *b'* it will be directed into the inside of the V-shaped base, or will pass downward along the outside of the screen.

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

1. The combination of the V-shaped base; the screen clamping strip secured to such base near one edge thereof and parallel therewith but separated therefrom to form an exit slot between such base and such strip, and suitable means for attaching the base to the screen frame.

2. The combination of the V-shaped base

arranged for attachment to a screen frame, the screen clamping strip adapted to embrace the edge of a screen and arranged parallel with the outer edge of such base, the rivets securing the screen clamping strip to the base, and the washers arranged on the rivets and interposed between such member and the base to hold such base and strip apart to form an exit slot between such base and strip.

3. The combination of the V-shaped sheet metal base; the braces connecting the two members of such base; the screen clamping strip adapted to embrace the edges of a screen and arranged parallel with the edge of the outer member of such base; the rivets securing such braces and the screen clamping strip to the outer member of the base, the washers arranged on the rivets and interposed between the screen clamping strip and the member to hold such strip and member apart to form an exit slot between such base and strip, and suitable means for securing the braces to the rear member of the base.

4. The combination of the V-shaped sheet metal base; the braces connecting the two members of such base; the screen clamping strip adapted to embrace the edge of a screen and arranged parallel with the edge of the outer member of such base; the rivets securing such braces and the screen clamping strip to the outer member of the base; the washers arranged on the rivets and interposed between the outer member and the strip to hold such member and strip apart to form an exit slot, the screen supporting straps secured to the inside of the inner member of the base and extending downward through slots in the bottom of the base and adapted to be attached to a screen, and suitable means for securing the braces to the rear member of the base.

5. The combination of the screen frame; the V-shaped metal base having its inner member secured to the upper portion of the frame and its outer member arranged slanting outward; the screen clamping strip secured to the outer side of such outer member, parallel therewith and arranged to form in combination with the outer member an exit slot; the screen, secured to the frame and having its upper end clamped in the screen clamping strip.

6. The combination of the frame; the V-shaped sheet metal base secured to the upper part of such frame and having its outer member slanting outward from the screen; the screen clamping strip secured to the outer side of such outer member and parallel therewith and arranged to form in combination with such member an exit slot; the screen secured to the frame and having its upper end clamped in the screen clamping strip, the outer ends of the outer member of the base being bent outward to clamp upon the screen and the screen clamping strip to close the opening between the screen and the ends of such member.

7. The combination of the V-shaped sheet

metal base; the braces connecting the two members of such base; the screen clamping strip adapted to embrace the edge of a screen and arranged parallel with the edge of the
5 outer member of such base; the rivets securing such braces and the screen clamping strip to the outer member of the base; the washers arranged on the rivets and interposed between the outer member and the strip to hold
10 such member and strip apart to form an exit slot, the screen supporting straps secured to the inside of the inner member of the base and extending downward through slots in the bottom of the base and adapted to be attached
15 to a screen, suitable means for securing the braces to the rear member of the base; the outer ends of the outer member of the base

being bent outward to clamp upon the screen and the screen clamping strip to close the opening between the screen and the ends of 20 such member.

8. A window screen having its frame provided at its top with an exit slot for insects, and having the top of the screen inclined outward toward such slot, and having a screen sup- 25 porting strap or a series of independent screen supporting straps fastened to the frame and extending downward and secured to the screen below the inclined portion thereof, as and for the purpose set forth.

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Witnesses:

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