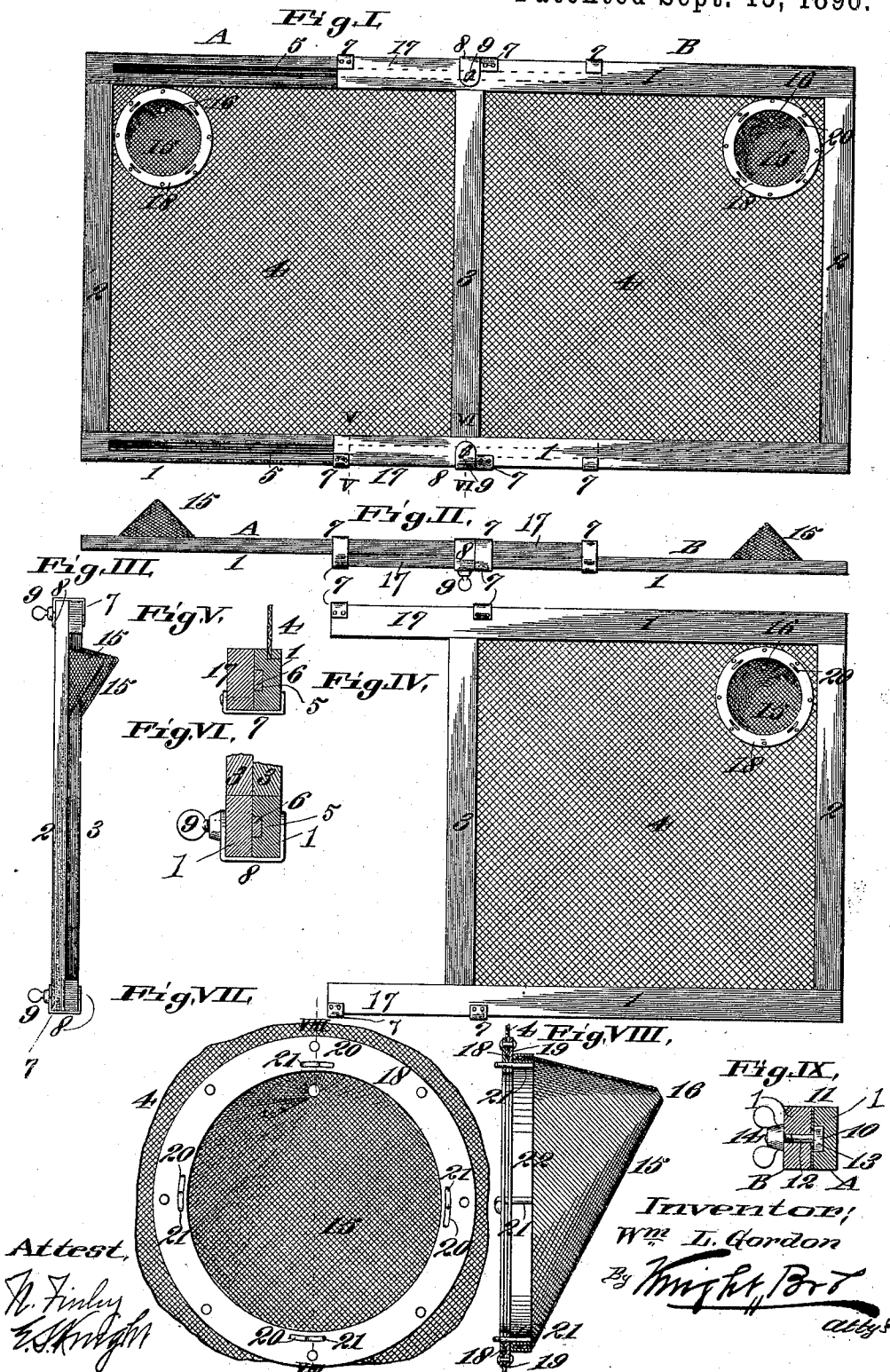


(No Model.)

W. L. GORDON.
FLY SCREEN.

No. 567,828.

Patented Sept. 15, 1896.



UNITED STATES PATENT OFFICE.

WILLIAM L. GORDON, OF HOT SPRINGS, ARKANSAS.

FLY-SCREEN.

SPECIFICATION forming part of Letters Patent No. 567,828, dated September 15, 1896.

Application filed June 1, 1896. Serial No. 593,754. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. GORDON, a citizen of the United States, and a resident of Hot Springs, in the county of Garland and State of Arkansas, have invented a certain new and useful Improvement in Fly-Screens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to certain improvements in fly-screens of the class that will permit the escape of flies therethrough, while preventing their return.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is an inside view of my improved screen. Fig. II is a top edge view. Fig. III is an end view. Fig. IV is an inside view of one member or half of the screen. Fig. V is an enlarged detail transverse section taken on line V V, Fig. I. Fig. VI is a similar view taken on line VI VI, Fig. I. Fig. VII is an enlarged detail inside view. Fig. VIII is a section taken on line VIII VIII, Fig. VII. Fig. IX is a detail transverse section showing a modification.

A and B represent the two members or sections of my improved screen. Each member consists of a rectangular frame composed of top and bottom rails 1, an end rail 2, and a meeting-rail 3, upon which is stretched and to which is secured the usual netting 4. The top and bottom rails 1 of the member A are provided with grooves 5 to receive tenons 6 on the top and bottom rails 1 of the member B. (See Figs. I, V, and VI.) 7 represents U-shaped straps riveted either to the top and bottom rails of the member A or to the top and bottom rails of the member B, or part to one and part to the other, and which embrace the other member, so as to hold the two members together while permitting them to slide freely in an endwise direction with relation to each other. For the purpose of holding the members to their adjustment, I provide U-shaped clips 8, that embrace the edges of the two members, as shown in Fig. VI, and each clip is provided with a thumb-screw 9. By tightening on the thumb-screws after the members have been adjusted to the proper

length to suit the width of the window, the members will be held to their adjustment.

Instead of using the tongue-and-grooved connection 5 6 between the members and using the clips 8 I may use the construction shown in Fig. IX, wherein the grooves 10 are formed in the upper and lower rails of one member, and to the faces of these rails are secured slotted plates 11, in which work the shanks of bolts 12, the heads 13 of which fit in the grooves 10. The outer ends of the bolts are provided with thumb-nuts 14. The heads of the bolts sliding in the grooves 10 form the equivalent of the tenons 6, (shown in Figs. V and VI,) and by tightening on the thumb-nuts 14 the two members may be drawn together in the same manner that they are clamped together by the clips 8.

15 represents a cone having an exit-opening 16 at its apex. There is preferably a cone 15 attached to each member of the screen, as shown in the drawings, and these cones are preferably located at the outer upper corners of the screens. They are placed at the upper edge of the screen for the reason that flies naturally ascend after alighting upon a screen, and they are placed at the outer ends of the screen, so as not to interfere with the closing up of the screen to as short a length as may be desired. To prevent the meeting-rails 3 striking these cones when closing the members up, I provide one or both of the members with extensions 17 on its upper and lower rails, and when the ends of these extensions reach the ends of the grooves 5 the closing up of the two members will be checked, and this occurs before the meeting-rails reach the cones.

My invention relates in part to the manner of forming or connecting the cones to the screens. This feature of my invention consists in cutting a hole in the screen of about the size of the base of the cone and then riveting to the screen around the edge of this opening an inner and an outer flaring ring 18 19, as shown in Figs. VII and VIII. The rings 18 19 are provided with slots 20 to receive the L-shaped heads of pins or projections 21, secured to the base of the cone 15 by means of a ring 22, that is to say, the ring 22 surrounds and is attached to the edge of the base of the cone, and the pins or projections

21 are made fast to this ring, so as to form a permanent and secure connection between the pins and cone. When the rings 18 19 have been riveted to the screen, the cone 5 is placed in position, with the heads of the pins 21 fitting in the slots 20, and then by giving the cone a slight turn it will be locked in position by the heads of the pins engaging the inner face of the ring 18. If at any time 10 it is desired to remove the cone, it can be done by simply turning it backward slightly and pulling it in a direction away from the screen. This part of my invention provides a means whereby an exit-cone can be quickly, 15 permanently, and neatly applied to any screen in use without removing the screen from its frame, and when applied the attachment has a neat appearance, and the cone is closely held in place against the screen, so as to 20 avoid the entrance of flies around it.

I claim as my invention—

1. A fly-screen comprising two members A

and B, each member consisting of a rectangular frame composed of top and bottom rails 1 having an extension 17, an end rail 2, a 25 meeting-rail 3 and the usual netting 4, the groove 5 and tongue 6 connection between the top and bottom rails, the U-shaped guide-straps 7, secured to one of the members, and the U-shaped clips 8 embracing the edges 30 of the members and each provided with a thumb-screw 9; substantially as described.

2. A fly-screen having a hole cut in one corner thereof, the inner and outer flat rings 18 and 19 formed with registering slots 20, and 35 the cone 15 having an exit-opening 16 at its apex and a supporting-ring 22 provided with pins 21 having L-shaped heads adapted to engage through the slots with the inner ring; substantially as described.

WM. L. GORDON.

In presence of—

F. W. GREGORY,
R. MOFFAT.