

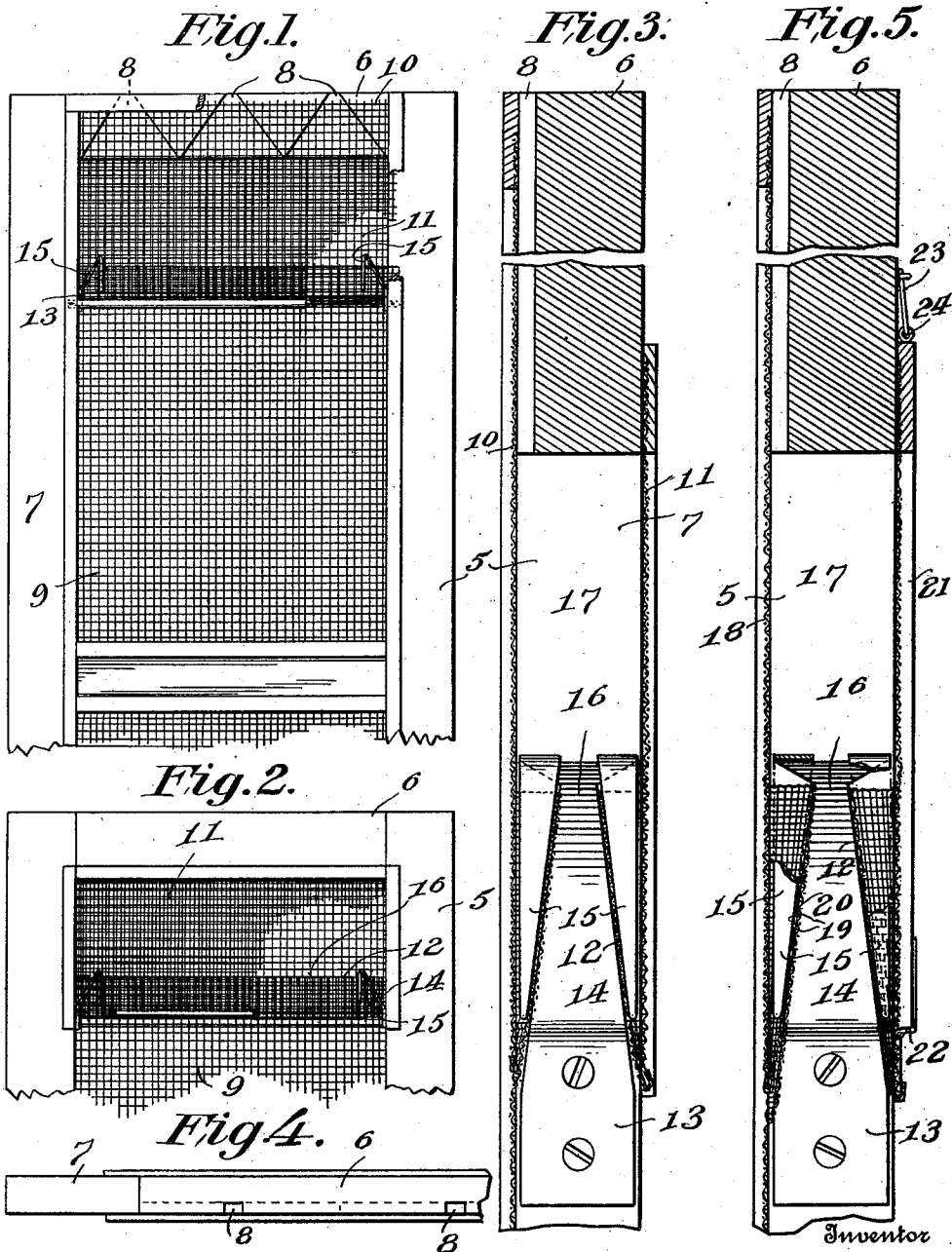
L. S. COUPLIN.

SCREEN.

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1,014,570.

Patented Jan. 9, 1912.



Levi S. Couplin

Witnesses

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SCREEN.

1,014,570.

Specification of Letters Patent.

Patented Jan. 9, 1912.

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To all whom it may concern:

Be it known that I, LEVI S. COUPLIN, a citizen of the United States, residing at South Greenfield, in the county of Dade and State of Missouri, have invented new and useful Improvements in Screens, of which the following is a specification.

The invention relates to screens, and more particularly to the class of fly screens designed to be connected to windows or doors.

The primary object of the invention is the provision of a screen of this character in which flies that have been confined within a room may gain an exit to the outside thereof, and are prevented from again entering the room.

Another object of the invention is the provision of a window or door screen having means whereby flies within a room may gain an exit by crawling up the screen through suitable exit passages therein, the same being disposed so that the flies may readily pass out of the room, but will be prevented from reëntering.

A further object of the invention is the provision of a window or door screen with a trap for catching the flies should the same fail to make an exit, said trap being provided with a door for permitting the cleaning of the same of flies or foreign matter that may be caught therein.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings: Figure 1 is a front elevation of a screen constructed in accordance with the invention. Fig. 2 is a fragmentary opposite face view thereof. Fig. 3 is an enlarged fragmentary sectional view through the screen. Fig. 4 is an enlarged top plan view of the screen. Fig. 5 is a view similar to Fig. 3, showing a slight modification of the invention.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to Figs. 1 to 4 of the drawings by numerals, 5 designates, generally, the screen frame, including top and bottom cross bars, 6, and vertical stiles or side bars 7, the same being united to the top and bottom bars in any desirable manner to form a

unitary frame. The top bar of the frame is provided in one face with inverted U-shaped recesses forming exit passages 8, for a purpose as will be hereinafter more fully described.

Secured to the outer face of the frame in any suitable manner is a wire cloth or mesh screen 9, the same being stretched taut from one stile to the other of said frame, and has its lower end connected to the bottom cross bar, while its upper end terminates spaced a considerable distance from the top cross bar and is left free. Secured over the gap between the free end of the screen 9 and the top bar 6 of the frame is a further wire cloth or mesh screen 10, the latter overlapping the screen 9 for a suitable distance, the said screen 10 being suitably secured to the frame 5, so as to overlie the passages therein.

To the inner face of the frame 5 is secured a wire cloth or mesh screen 11, the same being of a size to extend only partially the length of the frame, and is suitably secured to the latter, the lower end edge of the screen 11 being inturned and extended upwardly to provide a guard flange 12 which, together with the free edge of the screen 9, is inwardly deflected in a manner and for a purpose, as will be hereinafter more fully described.

Suitably secured to the inner face of the vertical stiles 7 between the screens 10 and 11 are spreading brackets, comprising a base 13 having struck outwardly therefrom an angularly disposed shank 14 provided with downwardly bent spaced vertically disposed outwardly tapering prongs 15, one of which being adapted to engage between the free upper end edge of the screen 9 and the free edge of the screen 10, while the other prong 15 is adapted to engage between the screen 11 and its guard flange 12, so that the free edge of the screen 9 and the guard flange 12 will be drawn and sustained in close relation to each other to provide an entrance opening 16 communicating with a trap space 17 between the screens 10 and 11 at the upper end of the frame. Thus, it will be seen that when flies alight upon the inner surface of the screen 9 and crawl upwardly thereon, they will enter the trap space 17 through the entrance opening 16 thereto, thereby being caught within the said trap space, and by reason of the inwardly deflected guard flange 12 and the free edge of

the screen 9, the flies caught will be prevented from reëntering a room, but will be permitted, on crawling upwardly upon the screen 10, to pass outside of such room through the exit passages 8 at the top of the screen frame. It is evident that the flies after making an exit from the room cannot reënter the same.

In Fig. 5, there is shown a slight modification of the invention, wherein the wire cloth or mesh screen 18 secured to the front face of the frame 5 is made of a length to extend to the top bar 6 of the said frame and to provide two folds 19 forming the inwardly deflected guard flange 20 which is held in such position by the prongs 15 of the brackets secured to the inner faces of the vertical stiles 7 of the screen frame. The screen 11 is of identical construction to that shown in Figs. 1 to 4 of the drawings, with these exceptions; that in lieu of fastening the screen to the inner face of the frame 5, it is mounted in a swinging frame section 21, the latter being connected to the vertical stiles 7 of the frame by means of hinges 22, whereby the section may be swung to open or closed position, thereby giving access to the trap space between the screens 10 and 11. This swinging frame section is provided with a catch device 23, the same being normally engaged with a keeper 24 to sustain the said section in closed position. However, it is evident that the said frame section may be opened to permit the cleaning of the trap space, whereby foreign matter or flies caught therein may be removed therefrom.

What is claimed is:

1. The combination with a frame having an open center and provided with inverted V-shaped exit passages at one end thereof, and opening through its inner and outer edges of wire cloth screens secured to opposite faces of the frame, one of said screens extending only a portion of the length of the frame and brackets secured to the inner edges of the sides of the frame and having upwardly converging portions provided with downturned forks engaging the intumed edge of one screen and a portion of the other screen whereby the said intumed edge and portion of the screen engaged by

said forks will be brought into close relation to each other to provide a trap at one end of the frame. 55

2. A fly screen, comprising a frame, a screen secured to the outer side of the frame and having an inwardly deflected portion intermediate the length of the frame, a second screen connected to the inner side of the frame and having an intumed free edge, the said frame being provided with exit passages communicating with the space between the screens, and brackets fixed to the inner side edges of the frame and having upwardly converging portions provided with downturned forks for engagement with the inwardly deflected portion of one screen and the intumed portion of the other screen whereby they will be sustained in close relation to each other to form an entrance to the space between the screens. 60 65 70

3. A fly screen, comprising a frame, a screen secured to the outer side of the frame and having an inwardly deflected portion intermediate the length of the frame, a second screen connected to the inner side of the frame and having an intumed free edge, the said frame being provided with exit passages communicating with the space between the screens, and brackets fixed to the inner side edges of the frame and having upwardly converging portions provided with downturned forks for engagement with the inwardly deflected portion of one screen and the intumed portion of the other screen whereby they will be sustained in close relation to each other to form an entrance to the space between the screens, a section hinged to the frame at the inner side thereof and supporting the screen disposed on the inside of the frame, whereby access may be had to the space between the said screens, and means carried by the section and frame, respectively, and coöperative with each for normally holding said section in closed position. 75 80 85 90 95

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

LEVI S. COUPLIN.

Witnesses:

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