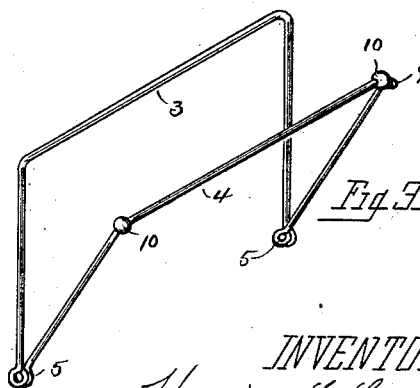
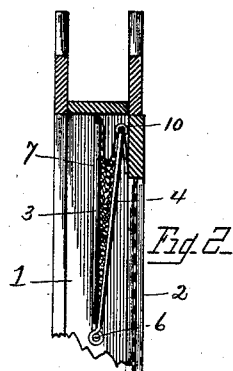
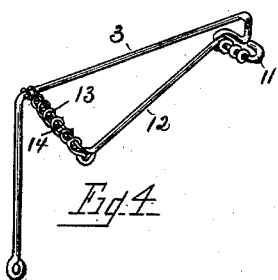
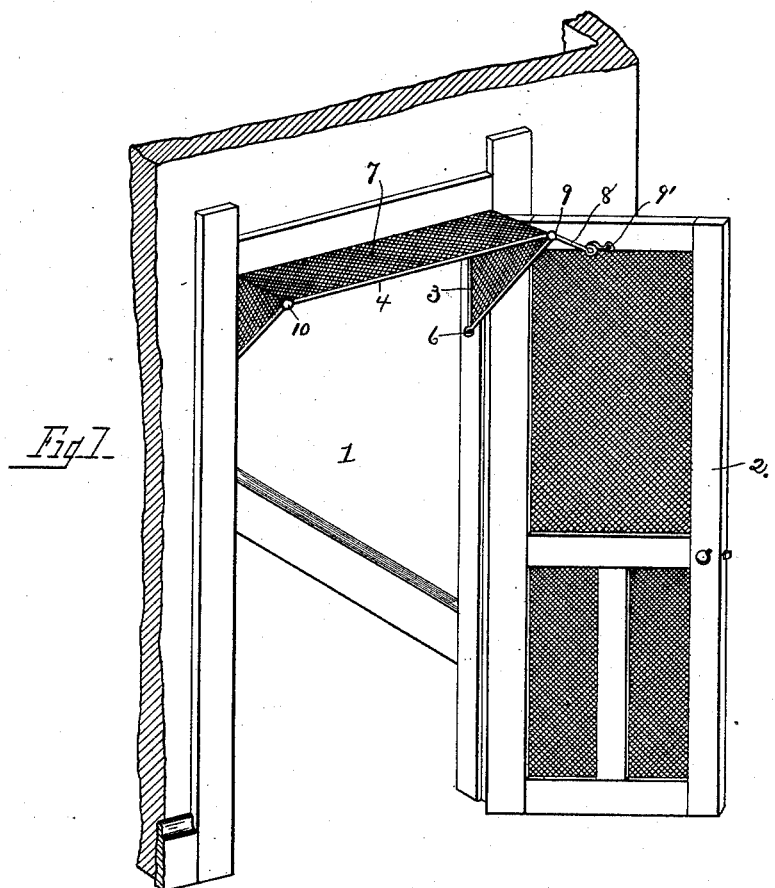


(No Model.)

H. L. LONG
INSECT GUARD FOR DOORS.

No. 524,596.

Patented Aug. 14, 1894.



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRIET L. LONG, OF WEST TOLEDO, OHIO.

INSECT-GUARD FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 524,596, dated August 14, 1894.

Application filed July 5, 1892. Serial No. 438,917. (No model.)

To all whom it may concern:

Be it known that I, HARRIET L. LONG, of West Toledo, county of Lucas, and State of Ohio, have invented certain new and useful
5 Improvements in Insect-Guards for Doors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the
10 same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to an insect guard for doors, and has for its object to provide means
15 for preventing the entrance of flies, mosquitoes and other insects when the door is opened.

The invention consists in the parts and combination of parts hereinafter described
20 and pointed out in the claims.

In the drawings: Figure 1 is a front elevation of a door provided with my improvements. Fig. 2 is a sectional detail view in
25 side elevation showing the door closed and the guard folded. Fig. 3 is a perspective view of the frame of the guard. Fig. 4 is a detail view of a modified form of guard frame.

My invention is more particularly adapted to screen doors, it having been observed that
30 flies, mosquitoes, &c., gather on the screen upon the outside thereof, and more particularly at the top, being attracted thereto by the odor escaping from the room, more especially from rooms in which cooking is done,
35 and are in readiness to enter the room as soon as the door is opened. I have provided a guard for the top and the upper portion of the sides, by which, when the door is opened, a netting is projected on a line nearly parallel
40 with the top of the door, whereby the entrance of the flies is prevented, and have so articulated the frame of the guard, that the act of opening the door expands a frame and netting which frightens the insects away.

1 designates the door frame, 2 the door.

3 designates a rectangular frame secured within the top of the door frame the purpose
45 of which is to provide a support to which a netting may be secured.

4 designates a rectangular frame formed with openings, 5, at each end to receive a
50 screw or nail, 6, which is passed through the

same, and like openings formed in the ends of frame 3, and into the door frame, by which arrangement the frame 4 is allowed to swing
55 outward, or fold within the door frame.

7 designates a netting secured upon frame 4, along its entire length, and also upon frame 4 its entire length, and of a width to allow the
60 frame 4 to fall from a vertical position to an angle of approximately forty five degrees from the pivotal point of the same when the door is opened.

8 designates a spring secured to the inner end of the guard, or the end nearest the door,
65 the opposite end being secured to the door at 9, with a coiled portion extending beyond and secured to the door at 9' whereby the spring exerts an outward pull upon the guard at all times.

Upon each outer corner of the frame 4 is
70 formed buffers 10, which contact with the door, and prevent wear of the netting or frame.

In operation, the door being closed, and any number of insects gathered upon the upper
75 portion of the same in readiness to enter the room when the door is opened, the act of opening the door extends the guard and not only prevents entrance, but frightens the insects from the door, and when the door is
80 closed the guard is compactly folded within the door jamb.

It will be apparent that I may dispense with the spring 8, and employ a cord or other flexible connection to expand the frame 4,
85 and allow the door to close the frame if desired, or the frame may be arranged to drop by its own weight and be folded back by shutting the door.

In Fig. 4 the frame 3 extends along but one
90 side of the door frame, and is formed with a loop 11 into which is yieldingly secured a bar 12 which extends at an angle horizontally from the frame 3, and is projected outwardly at the outer end by means of a coiled spring
95 13 secured to frame 3 and the bar, the throw of the spring being limited by a cord 14. This arrangement is convenient when the door is to be opened but part way, as in this case the bar 12 is at an angle corresponding to the radial
100 movement of the door upon its hinges, this latter construction is interchangeable, or adapted to doors swinging either way, as the frame 3 is first secured to the door frame, and

afterward the bar is secured to the loop upon the side to project the same to the inclination of the door when opened.

What I claim is—

5 1. In an insect guard, the combination with a fabric secured within the door frame, of a bar pivotally arranged within the door frame, and to which the fabric is connected, said bar being so connected that when the door is
10 opened the bar will move toward the same to expand the cloth and be folded back by the closing of the door.

15 2. A guard for doors comprising a rectangular frame secured within the door jamb, a frame pivotally connected with the same, a foraminous covering extending from one frame to the other, and a connection from the

door to the frame to extend or fold the pivoted frame as the door is opened or closed respectively.

20 3. In an insect guard, the combination with essentially rectangular frame, secured to the door jamb, a fabric secured to said frame, a bar pivotally connected with said frame and also connected with the fabric and a spring
25 for moving said bar outward to expand the fabric when the door is opened.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

HARRIET L. LONG.

Witnesses:

WILLIAM WEBSTER,
CARROLL J. WEBSTER.