

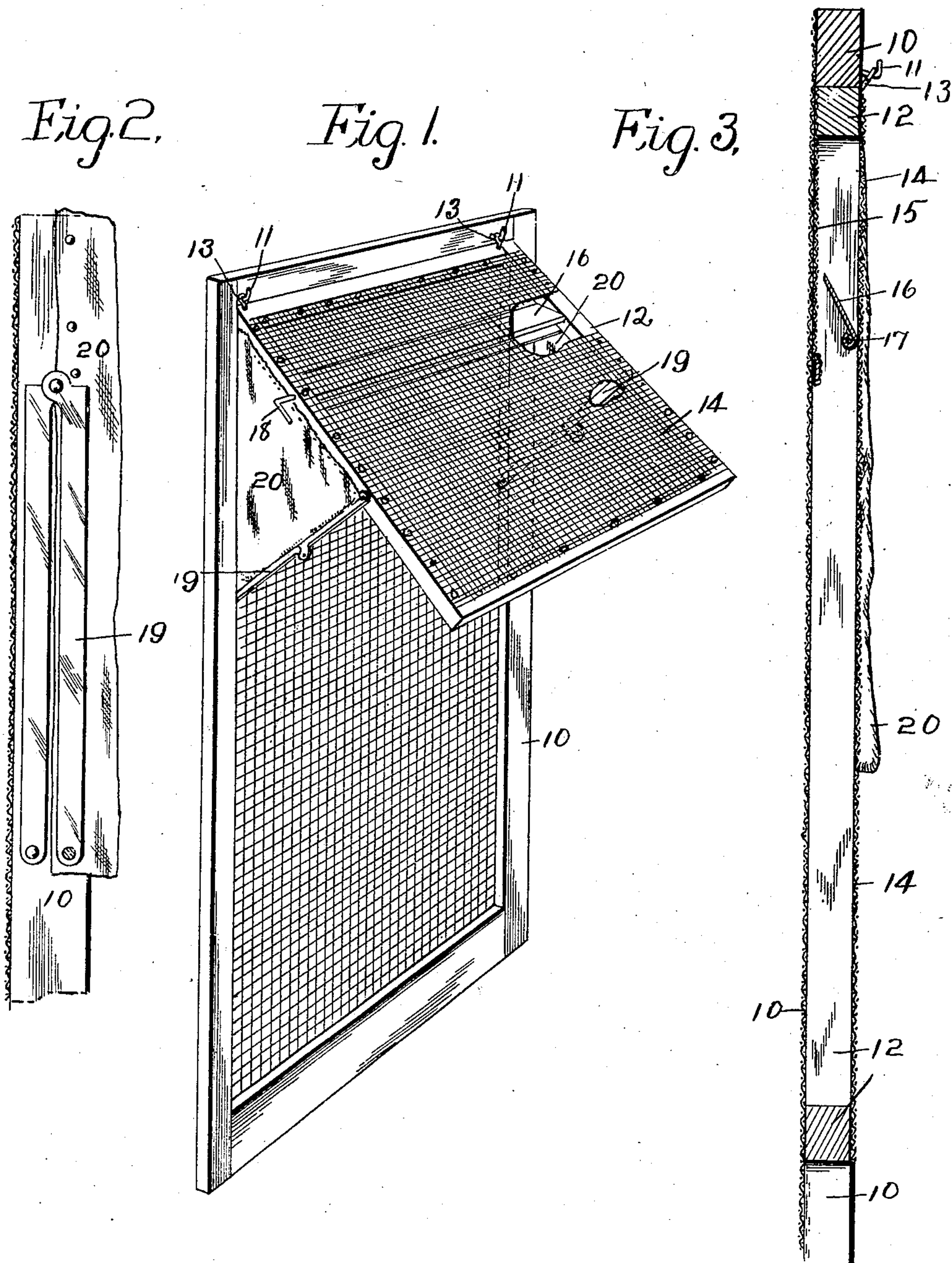
No. 868,180.

PATENTED OCT. 15, 1907.

M. C. HARLAN.
INSECT TRAP.

APPLICATION FILED FEB. 13, 1907.

2 SHEETS—SHEET 1.



Witnesses

A. G. Hague
J. B. Smutney

Inventor:

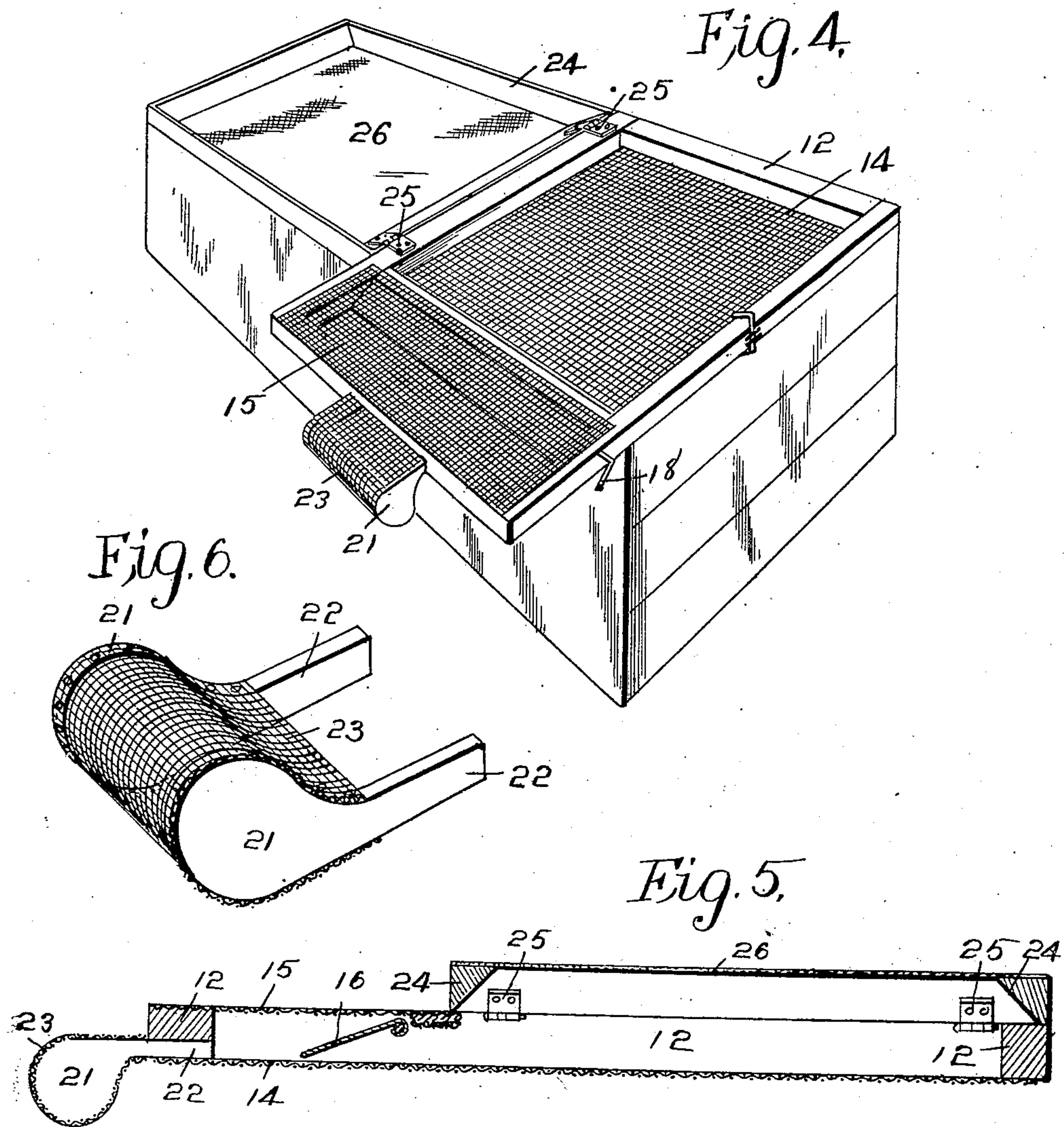
by M. C. Hearlan
Orwig & Lane attys

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UNITED STATES PATENT OFFICE.

MARTIN C. HARLAN, OF SOUTH PASADENA, CALIFORNIA.

INSECT-TRAP.

No. 868,180.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed February 13, 1907. Serial No. 357,130.

To all whom it may concern:

Be it known that I, MARTIN C. HARLAN, a citizen of the United States, residing at South Pasadena, in the county of Los Angeles and State of California, have invented a certain new and useful Insect-Trap, of which the following is a specification.

The object of my invention is to provide an insect-trap of simple, durable and inexpensive construction designed to be readily, quickly and easily applied to screen doors or windows or to berry-boxes or the like, and so arranged that the insects that ordinarily gather at these places may be trapped and then killed.

My invention consists in the construction, arrangement and combination of the various parts of the trap, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 shows a perspective view of a device embodying my invention and applied to a screen door. Fig. 2 shows an enlarged, detail, sectional view illustrating one of the folding arms for supporting the side curtains. Fig. 3 shows a central, vertical, sectional view through a part of the screen door and my improved trap applied therein in a folded position. Fig. 4 shows a perspective view of a box having a modified form of my improved fly-trap applied thereto in its open position. Fig. 5 shows a longitudinal, central, sectional view of the modified form shown in Fig. 4 with the trap in its folded position, and Fig. 6 shows an enlarged, perspective view of the detachable chamber in said receptacle.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate a screen door or window of the ordinary kind. My improved trap may be applied either to the exterior or interior of the door or window screen frame as may be desired. It is preferably applied to the exterior and two screw-hooks 11 are placed in the upper portion of the door or window frame to support the trap. The trap proper comprises a rectangular frame 12 having screw-eyes 13 at its top to engage the hooks 11. A screen 14 is placed over one side of the frame 12 and on the opposite side of said frame near its top is a screen 15 extending from one side of the frame to the other, and from the top of the frame downwardly a short distance, as clearly shown in Fig. 3. Between the screens 15 and 14 is a pivoted partition 16 extending from one of the sides of the frame 12 to the other and fixed to a rod 17 which extends through the sides of the frame 12 and is provided with a handle 18 so that the partition may be placed either in position close to the screen 14 or with its upper end slightly spaced apart from the partition 15 just far enough to permit insects to enter between the screen 15 and the end of the partition 16. said partition is shown in this position in Fig. 3.

I provide for supporting the frame 12 in a position projecting outwardly and downwardly from the window or door frame, as follows: Pivoted to the side pieces of the window or door frame are two jointed arms 19, the outer ends of which are pivoted to the sides of the frame 12. These arms may, if desired, be folded to the position shown in Fig. 2, thus allowing the frame 12 to stand parallel with the window or door frame, as shown in Fig. 3. To provide for preventing the escape of insects at the sides of the frame 12, I have provided two flexible side curtains 20 with their edges fixed to the frame 12 and their lower edges fixed to the jointed arms 19, as shown in Fig. 1.

In practical use with this form of the invention and assuming the frame to be supported in the position shown in Fig. 1, then insects will gather upon the screen covering the frame 10 and will crawl up toward the top of the screen. When they have gathered there in large quantities, the operator folds the jointed arms 19, thus allowing the screen frame 12 to lie parallel with the window or door screen. Then the insects will crawl up past the pivoted partition 16 into the chamber above the partition and they cannot escape from this chamber.

The insects in the chamber above the partition may be killed when confined in said chamber and may be removed by swinging the partition 16 toward the screen 14, thus allowing them to drop down from said chamber. By means of this arrangement, the insects that are gathered upon the exterior of a screen door are prevented from entering the door opening when the screen door is opened by persons passing in and out.

In the modified form shown in Figs. 4, 5 and 6, I have dispensed with the jointed arms 19 and the curtains 20 and have provided an additional insect containing chamber to be placed in communication with the compartment above the partition 16. This chamber comprises two side pieces 21 with projecting ends 22 designed to enter an opening formed in the adjacent end of the frame 12. The sides 21 are covered with netting 23 to form a chamber. The insects that gather in the chamber above the partition 16 will enter the detachable chamber and may be removed with the detachable chamber and killed by putting them in water, or in any other desirable way.

In adapting my improvement for the protection of berry-boxes or other exposed articles, I provide a rectangular frame 24, the sides thereof being beveled at their inner edges. This frame is connected by hinges 25 with one side of the frame 12 and a screen or cloth 26 is stretched over the frame 24, said cloth 26 and the screen 14 being of a size to cover the berry-box or article to be covered. A suitable bait is placed upon the netting or cloth 26 to attract the insects and when they have gathered in considerable quantity, the operator folds the frame 24 over the frame 12, as shown in Fig. 5, thus trapping the insects between the parts 26 and 14.

When they are thus trapped, they will crawl past the partition 16 and into the chamber beyond said partition and from there, they will enter the detachable chamber where they may easily be killed. As soon as the insects have left the frame 24, it may be again opened to the position shown in Fig. 4 and the box will be thereby protected.

I claim as my invention:—

1. In an insect trap, the combination of a frame, a screen covering one side of the frame, a screen on the opposite side of the frame extended across the top thereof and forming a chamber between the screens and a pivoted partition in said chamber in one position capable of lying flat against one of the screens and in another position having one edge close to the other screen and a handle projected beyond the frame for controlling the pivoted partition.

2. In an insect trap, the combination of a frame, a screen for covering one side of the frame, a screen covering a part of the opposite side of the frame and forming with the first screen a chamber between the screens said frame having an opening leading from the said chamber, a screen covered frame detachably connected with the main frame and communicating with the compartment in

the main frame, and a pivoted partition between the screens of the main frame.

3. In an insect trap, the combination of a frame, a screen covering the frame, a covered frame hinged to the side of the main frame and capable of standing in line with the main frame and also capable of swinging over on top of the main frame and an insect containing compartment communicating with the space between the frames when they are arranged one above the other.

4. An insect trap, comprising a rectangular frame, a screen covering one side of the frame, a screen across the opposite side of the frame near one end thereof, said end of the frame formed with an opening, a detachable screen covered frame connected with said end of the main frame and communicating therewith through said opening, a pivoted partition in the compartment between the screens on the main frame and an auxiliary frame hinged to the side of the main frame and having inner its edges beveled and a cover for said frame, substantially as set forth.

Des Moines, Iowa, January 21, 1907.

MARTIN C. HARLAN.

Witnesses:

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