M. E. BOERNGEN.

FLY CATCHER.

APPLICATION FILED NOV. 15, 1909.

979,640. Patented Dec. 27, 1910.

Fig 1

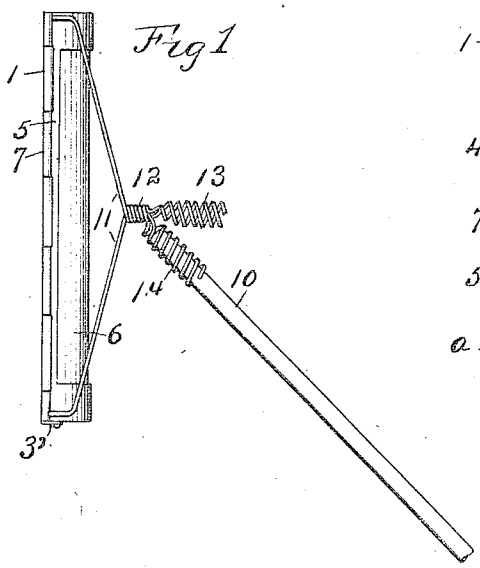


Fig 2

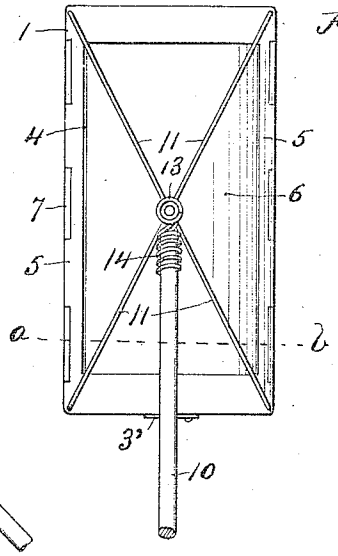


Fig 3

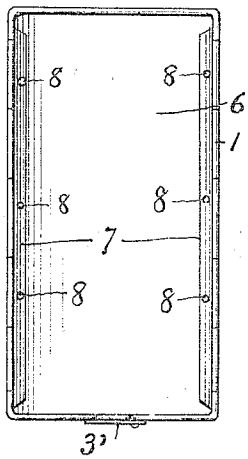


Fig 4

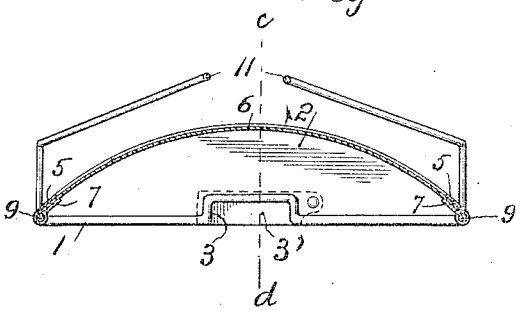
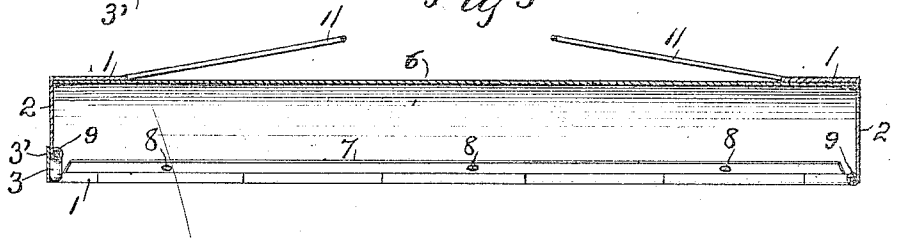


Fig 5



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FLY-CATCHER.

979,640. Specification of Letters Patent. Patented Dec. 27, 1910.

Application filed November 15, 1909. Serial No. 528,105.

To all whom it may concern:

Be it known that I, MAX E. BOERNGEN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Fly-Catchers, of which the following is a specification.

My invention relates to improvements in fly catchers.

The object of my invention is to provide a fly catcher which is simple in construction, efficient in operation and cheap to make.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawings illustrative of the preferred form of my invention Figure 1 is a side elevation. Fig. 2 is a plan view. Fig. 3 is a bottom view. Fig. 4 is a cross section on the dotted line *a*—*b* of Fig. 2. Fig. 5 is a longitudinal sectional view on the plane of the dotted line *c*—*d* of Fig. 4.

Similar reference characters denote similar parts.

In the preferred form of my invention the fly catcher comprises a receptacle having the form of the longitudinal section of a hollow cylinder, a portion of the inner surface of the receptacle being sticky so that flies or other insects coming into contact with it will be held. Preferably the portion having the sticky inner surface is detachable and may consist of an ordinary sheet of fly paper one side of which is coated with a sticky material.

1 denotes a rectangular frame having the form of the longitudinal section of a hollow cylinder provided with closed ends 2, one of which is preferably provided with an opening 3 having a closure 3′ pivoted or otherwise secured to the end. To lighten the frame it may have in the back an opening 4, leaving at opposite sides intermediate the ends 2 upwardly and inwardly inclined portions or flanges 5, against which may be clamped in concavo-convex form a sheet of fly paper 6 the sheet being disposed with the sticky side on the concave or inner side of the sheet. To detachably clamp the sheet 6 against the flanges 5 any suitable means may be employed, as for instance, as shown in the drawings, two plates 7 hinged respectively to opposite side edges of the frame 1. The plates 7 are preferably provided with indentures 8 on their upper sides so as to more securely hold the fly paper. Preferably the lower edge of the frame 1 is wired by means of a rectangularly formed wire 9 to which the plates 7 are tightly hinged so as to retain them in the clamping position shown in Figs. 3 and 4.

Means are provided to support a handle 10 at different angles to the axis of the cylinder of which the frame forms a longitudinal portion. The preferable means for effecting this function consists in securing to the frame adjacent its four corners one set of ends of four wires 11 the opposite sets of ends of which are formed into a central coil 12 at the back of the frame 1. Two of the wires are formed into spiral form and so as to form a socket 13 the axis of which is at right angles to the axis of the frame. The other two wires are similarly formed to make a socket 14 the axis of which is oblique to the axis of the frame 1.

To mount the fly paper 6 in the device, the plates 7 are swung downwardly and the sheet of fly paper 6 is then inserted in concavo-convex form between the ends 2 and with opposite edges inserted between the flanges 5 and plates 7. The plates 7 are then swung to the position shown in Fig. 4 in which they will clamp the sheet 6 against the flanges 5. The sticky side of the sheet 6 is made the concave side. The handle 10 is then inserted in one or the other of the sockets 13 or 14. The receptacle is then manipulated so as to cover a fly or flies which are on a plane surface. As soon as the flies are covered they will fly up against the sticky side of the sheet 6 by which they will be held. When the flies are on the ceiling the handle may be placed in the socket 13, and when they are high on a wall the handle may be placed in the socket 14 in order that the device may be more easily squarely set against the plane surface supporting the flies.

To catch ants or similar insects, a little sugar may be placed on the sticky surface of the sheet 6 and the device set open side down on a horizontal plane surface. The closure 3′ is then swung to an open position. The ants will enter the receptacle through the opening 3 and in order to reach the sugar will walk on the sticky surface and be held thereby. When the fly paper 6 has been sufficiently filled with insects it may be replaced with a fresh sheet.

I do not limit my invention to the structure described and shown, as many modifications of it, within the scope of the appended claims, may be made without departing from its spirit.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In a fly catcher, the combination with a frame having closed ends and parallel side flanges, of hinged devices for clamping a sheet of fly paper to said flanges intermediate said ends.

2. In a fly catcher, the combination with a frame having closed ends, one of which is provided with an opening and a closure for said opening, of means for detachably securing intermediate said ends and in concavo-convex form a sheet of fly paper..

3. A fly catcher comprising a receptacle having the form of a longitudinal section of a hollow cylinder having closed ends one of which has an opening and a closure therefor, a portion of the inner surface of the receptacle being sticky.

4. In a fly catcher, the combination with a frame having the form of the longitudinal section of a hollow cylinder, of means for detachably securing in said frame against the curved inner surface thereof a sheet of fly paper.

5. In a fly catcher, the combination with a frame having the form of the longitudinal section of a hollow cylinder and provided with means for supporting a handle at different angles to the axis of the cylinder, of means for detachably supporting in said receptacle in concavo-convex form a sheet of fly paper.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

MAX E. BOERNGEN.

Witnesses:
E. B. House,
J. C. Irwin.