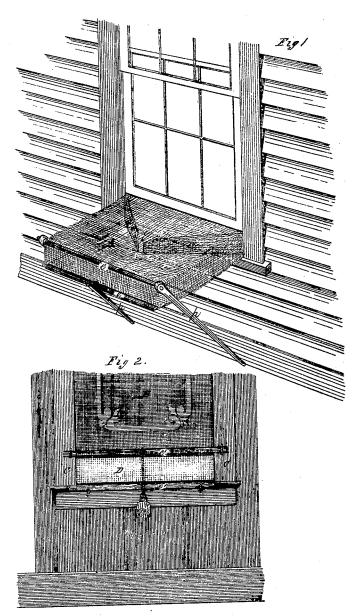
Horton y Bryan, Fly Iran.

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Witnesses. ODOok Isaae G. Orano

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PETER D. HORTON AND EZRA T. BRYAN, OF MARENGO TOWNSHIP, MICHIGAN.

Letters Patent No. 111,936, dated February 21, 1871.

IMPROVEMENT IN FLY-TRAPS.

The Schedule referred to in these Letters Patent and making part of the same.

We, PETER D. HORTON and EZRA T. BRYAN, both of the township of Marengo, in the county of Calhoun and State of Michigan, have invented certain Improvements in Devices for Catching Flies and removing them from dwelling-houses, shops, stores, &c., which improved device we denominate a Fly-Catcher, of which the following is a specification.

The nature and object of our invention are as fol-

The invention relates to the employment of a bagshaped receptacle of netting, of linen, cotton, or other textile fabric, woven sufficiently close to imprison flies or similar insects, and at the same time admit all the light possible through its interstices, to be used in connection and combination with any suitable opening through into a building, such as may be made by the partial lifting of a window-sash or opening of a door, or with special openings made for the purpose.

The mouth of the said netting-bag is designed to be so adjusted and fitted against or through the walls of such opening that the interior of the bag, when it is projected from the building, will communicate directly with the room from which the insects are to be removed.

The object of our invention is, by the use of a cheap, portable appliance, to take advantage of the natural proclivity of insects to fly toward the light, and thus, by darkening the room, to drive them more readily therefrom into the extended luminous sack, where they are captured in mass and may be disposed of in any desirable manner.

The invention consists in a bag made of netting or other material suitable for the purpose, with distending strips and props, all so made that the whole device can be readily removed, thus dispensing with a frame fixed to the window.

The invention also consists in combining with the bag converging wings or partitions, so arranged as to prevent the return of the insects to the room, all as hereinafter described.

The most common and ready application of our invention is embodied in the accompanying drawing, in which—

Figure 1 is a broken perspective view, showing the netted fly-receptacle as projected externally from a partially-opened window.

Figure 2 is a broken elevation as seen from the interior of the room, the window of which is provided with the fly-receptacle.

General Description.

A is the fly-receptacle, made usually in the form of a bag, of the fabric known as musquito-netting, but it may be of fine wire or other suitable material.

The bottom or end of this bag is usually furnished with two lateral wooden strips e e to distend it when in place, and the open end or mouth is furnished likewise, as shown at e' e', to tack the edge of the fabric to and facilitate its temporary attachment to the window-frame or other part of the building.

I usually hang or hook the lower mouth-strip e' over the window-stool s, and hang the upper strip against the face-casings C in the room, at a sufficient height to permit, when the sash is lifted, free passage to the flies.

The end of the bag A may be conveniently supported in projection by means of detachable props p p having a bearing at the upper end, slipped over end-pins on the upper strip e, and said props being inclined at the foot angularly against the building, will furnish the necessary tension to the netting; but should said netting be of wire it may be readily attached over the opening so that the projecting end will not require support.

When it is deemed desirable to retain the net receptacle in place, it may be converted into a trap by the addition of an interior funnel-shaped rectangular bag, open at both ends, (as shown at a a;) or in place of this netted tapering bag, two wings, converging together at the inner ends, so as to form a narrow ingress, i, into the main receptacle A, will answer substantially the same purpose to prevent the return of the flies into the room from which they have been driven or enticed by the light or by bait, or both combined

The operation is as follows:

Our net-receptacle A is placed against the outside case or wall of any opening leading into the interior of a room infested with flies or other winged insects, and its mouth is secured temporarily over such opening as before described, or in any other convenient manner.

The room is then darkened, usually by lowering the window-shades B on top of the netted bag, so that the opening leading into said net, as at D, will be the only luminous point.

The flies, &c., in the room, disturbed by the darkness, will in a few minutes, by the aid of a slight switching, swarm toward and pass through the luminous opening into the net-receptacle A, which, if provided with the funnel-net or side-wings a a, will secure them against a return into the room when relighted; otherwise the net A must be detached and its mouth closed before the window-shades are raised. In this way fles may be rapidly taken from rooms in mass and destroyed in any suitable way whenever convenient.

The obstruction to free ventilation and continual

care involved in the use of net-work blinds to exclude flies during the sultry hours of the day, are serious objections to their use, and the same may be said of the fly-poisons and baited traps to destroy flies, which are in their nature both dangerous and disgusting.

The application of our cheap, safe, and cleanly device will secure comfort in a house at all times, and especially when used just previous to taking meals, as, although it may be neither possible nor desirable to capture and destroy all the flies that infest a building as fast as they accumulate, by the use of our projecting luminous net, yet it furnishes a simple and ready means of keeping their numbers within bearable limits within the living rooms of a house.

We do not claim broadly the employment of a net-

ting-bag in connection with and projecting from a window as a fly-trap, as we are aware that this has

been done before; but

We claim as our invention—

1. The net-work bag A, provided with distending strips e e e' e' and props p p, when the entire device is adapted to be removed from the door, window, or other opening, as herein described, whereby a stationary frame is dispensed with.

2. In combination with the bag A, made, provided, and applied as described in the preceding clause, the converging wings or partitions a a, having an opening, i, between them, at the center, to form a trap, substantially as set forth.

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Witnesses:

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