

(No Model.)

J. L. SPEARS.
TOBACCO FLY CATCHER.

No. 267,375.

Patented Nov. 14, 1882.

Fig. 1.

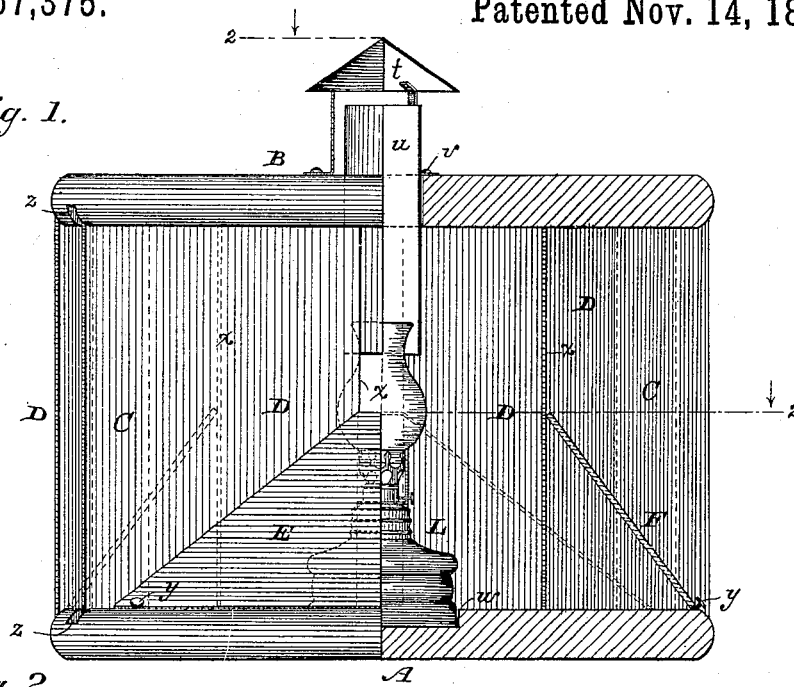
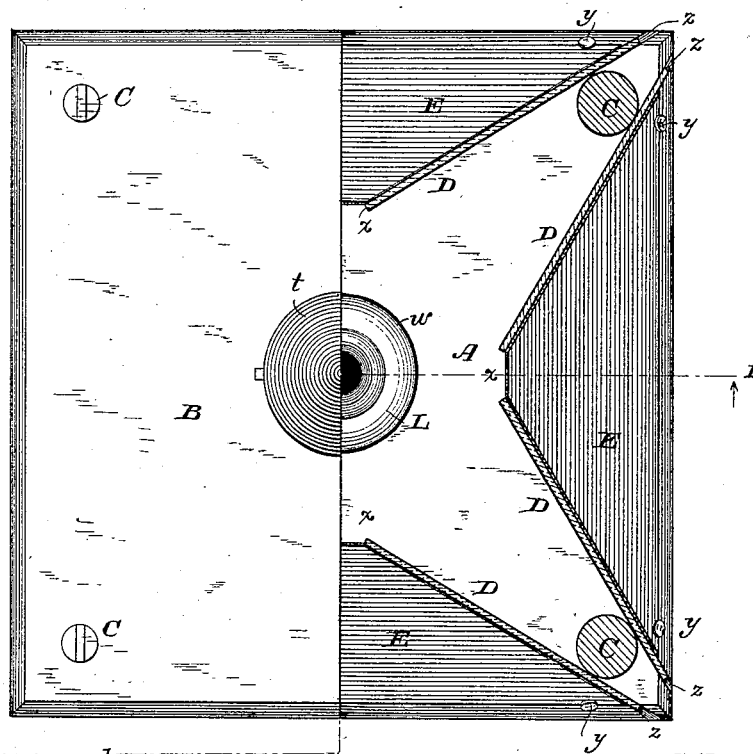


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN L. SPEARS, OF NEAR DANVILLE, KENTUCKY.

TOBACCO-FLY CATCHER.

SPECIFICATION forming part of Letters Patent No. 267,375, dated November 14, 1882.

Application filed August 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. SPEARS, a citizen of the United States, residing near Danville, in the county of Boyle, Kentucky, have invented a new and useful Improvement in Tobacco-Fly Catchers, of which the following is a specification.

This invention relates to the extermination of the destructive tobacco-worm by destroying the "flies" of which such worms are the larvæ, and to the means for effecting this result, which may be described as the "lantern-trap" or "lighted catcher," in which the well-known attraction to insects which a light affords at night is utilized for their capture and destruction.

Various forms of these "insect-catchers" have heretofore been proposed, and their use for exterminating the tobacco-worm has been suggested; but no such means is commonly or generally used for this purpose.

My present invention consists in certain novel combinations of parts in a tobacco-fly catcher having a central attracting lamp or lantern, to wit: first, in the combination of a floor-piece and a top piece, each provided with peculiarly arranged grooves, rectangular pieces of flat window-glass held in said grooves as removable slides, and forming re-entrant angular walls of glass, with inlet-openings at their innermost points, and triangular pieces of glass applied externally in inclined position within the re-entrant angles of the transparent sides, and held in place by stops on said floor-piece, whereby elevated vertical inlet-openings are formed at said innermost points of the transparent sides, with transparent inclines leading thereto, so as to facilitate the entrance of the tobacco-flies and assist in preventing their escape without obstructing the light; second, in the combination, with said floor-piece and top piece and said rectangular pieces of glass, of corner-posts, securely uniting the former parallel with each other, and closing the outermost points of the space within the re-entrant angular walls, whereby I obviate forming tight joints between said pieces of glass, and at the same time render the catcher secure against the escape of the tobacco-flies from said outermost points, into which they are driven by the heat of the central lamp or lantern, as herein-after more fully described.

Figure 1 of the drawings which accompany this specification is a side view of my tobacco-fly catcher, half in vertical section; and Fig. 2 is a top view of the same, half in horizontal section, the respective planes of section being indicated by broken lines correspondingly numbered.

Like letters of reference indicate corresponding parts in the two figures.

The frame of my tobacco-fly catcher is composed of a square floor-piece, A, and a square top piece, B, with four corner-posts, C, round in cross-section, by which said floor-piece and top piece are securely united parallel with each other, these parts being preferably of wood.

Transparent sides are formed by pieces D E, of ordinary flat window-glass of two simple shapes, the former being rectangular and the latter substantially broad-based triangles, with inclined edges of equal length and flattened obtuse angles, as shown. Eight of the main pieces D and four of the triangular pieces E are used. They can readily be cut from given samples by any one who can use a glass-cutter, and can consequently be readily reproduced. To receive and support said main pieces D of the glass, the floor-piece A and top piece, B, of the frame are each provided (before they are united) with eight grooves, *z*, drawn from as many points properly located in a circle struck from the vertical center of the catcher, and extending outward close alongside the corner-posts C, to the edges of said floor-piece and top piece at their respective corners. Said main pieces of the glass slide readily into these grooves and form re-entrant walls of glass, and said corner-posts form the outer limits of the space within these, and obviate any necessity for close joints at the corners. To receive and support said triangular pieces E of the glass, said floor-piece A is simply provided with stops *y*, in the form of tacks, driven into the edges of said floor-piece at a suitable angle. Said triangular pieces E rest in inclined position against said main pieces D, with their lower edges upon said floor-piece inside of said stops, and form inclines leading upward to elevated vertical inlet-openings *x* in the several sides of the catcher, between the inner edges of said main pieces D, and consequently at the innermost point of each re-entrant angular side of

the catcher as formed by said pieces of glass. Said floor-piece A is provided, moreover, (before the parts of the former are united,) with a central recess, *w*, to hold a suitable lamp or lantern, L, and said top piece, B, is constructed with a matching central ventilating-orifice, *v*, provided with a sheet-metal guard-tube, *u*; and a sheet-metal conical cowl, *t*, is attached to the top so as to be supported above said opening *w*, to coact with the chimney of an ordinary lamp, as shown. If a suitable "lantern" be adopted, these provisions may be omitted; or said opening and cowl may in this case be used for ventilation, with a guard of wire-gauze or the like to prevent the escape of the tobacco-flies through said opening.

The tobacco-flies are attracted through the inlets *x* by the light of the lamp or lantern L, and once within the glass walls they cannot escape, their movements away from the heat taking them into the closed corners of the catcher.

The glass is readily removed from one side of the catcher, to admit the filled and lighted lamp or lantern or to empty the catcher, the several triangular pieces being lifted off in an instant in the latter operation if the tobacco-flies have penetrated beneath them. Moreover, without disturbing a fastening, all the glass may be quickly removed to facilitate cleaning it, so that the brilliancy of the light may be unimpaired; and if a piece of glass be broken, another like it may be quickly produced from a fragment of window-glass.

My tobacco-fly catcher may have only three sides, or more than four sides, if preferred, the

number of corner-posts and the arrangement of grooves being correspondingly modified. It may also be adapted to be supported upon a post or the like, or may be suspended like an ordinary lantern, and the shapes and proportions of the parts, except as hereinafter provided, are considered immaterial.

Having thus described my invention, I claim—

1. In a tobacco-fly catcher having a central attracting lamp or lantern, the combination, substantially as herein specified, of a floor-piece and a top piece provided with grooves and stops, and rectangular and triangular pieces of glass held in place by said grooves and stops, and forming re-entrant angular transparent sides, having elevated vertical inlet-openings at their innermost points, with external inclines leading to said openings, as shown and described, for the purposes set forth.

2. In a tobacco-fly catcher having a central attracting lamp or lantern, the combination of a floor-piece and a top piece provided with grooves, as shown and described, rectangular pieces of glass occupying said grooves as removable slides, and forming re-entrant angular walls of glass, with inlet-openings at their innermost points, and corner-posts arranged within the inclosure formed by said grooves, and serving to close the outer limits of the space within said walls of glass, substantially as herein specified, for the purposes set forth.

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Witnesses:

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