

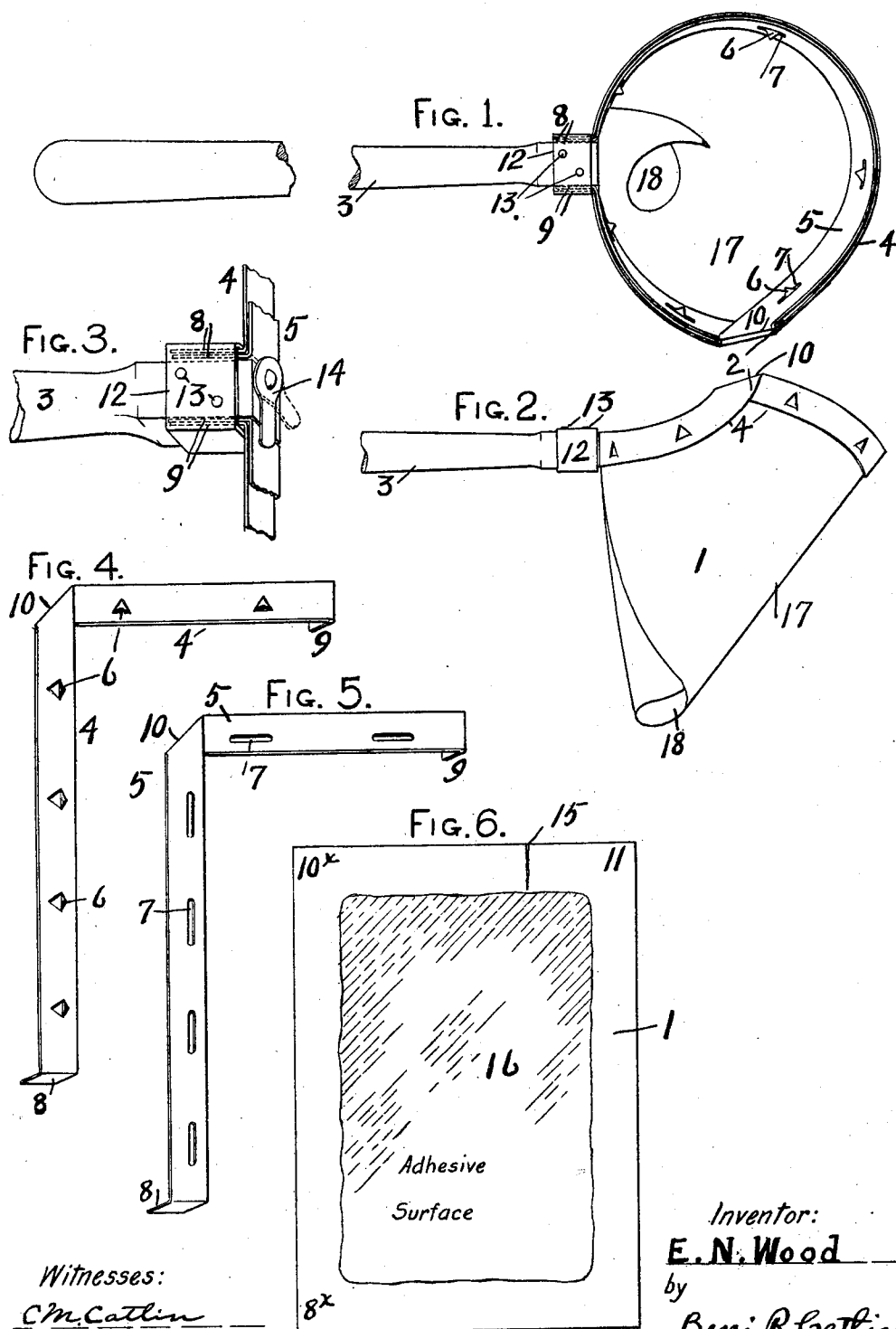
No. 683,092.

Patented Sept. 24, 1901.

E. N. WOOD.
INSECT CATCHER.

(Application filed May 25, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD N. WOOD, OF ELMIRA, NEW YORK.

INSECT-CATCHER.

SPECIFICATION forming part of Letters Patent No. 683,092, dated September 24, 1901.

Application filed May 25, 1901. Serial No. 61,927. (No model.)

To all whom it may concern:

Be it known that I, EDWARD N. WOOD, a resident of Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Insect-Catchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to insect catchers or traps, and has for its object to provide an efficient device for catching flies, gnats, mosquitoes, and other winged insects.

The invention consists in the construction herein described and pointed out.

In the accompanying drawings, Figure 1 is a plan of the catcher, its handle being broken. Fig. 2 is a side elevation. Fig. 3 is an enlarged perspective of devices for joining the handle and a funnel. Figs. 4 and 5 are plans of the members of the frame of the funnel. Fig. 6 is a plan of a sheet of paper provided in part with an adhesive coating.

The catcher consists of a sheet of flexible material 1, a frame 2, and a handle 3. The flexible material, preferably ordinary fly-paper, is bent to the form of a frustum of an oblique hollow cone and has one edge secured between metal strips or frame members 4 and 5. The paper is in the present instance secured between the frame members 4 and 5 by means of tongues 6, formed by punching the frame-strip 4. These are passed through the paper and then through slots 7 in the strip 5. The tongues may be clenched; but it is not necessary nor generally desirable. The strips 4 and 5 are each bent at a suitable point between their ends, as at 10, so that substantially a right angle is included between the end parts of said strip, as shown. They have also each a bend on their opposite ends, whereby lugs 8 and 9 are formed for connection with the handle.

12 denotes a ferrule secured to the handle by any convenient means, such as nails or screws 13. This ferrule is sufficiently large in one direction to permit the lugs 8 and 9 to be inserted between it and the opposite sides of the handle, respectively, as indicated in Fig. 3.

14 denotes a latch pivoted to the end of the handle to hold the lugs in the ferrule and on

the handle. To provide for the insertion or removal of the lugs as required to connect or separate the handle and funnel, the latch can be moved to the situation indicated by broken lines. The handle provided with the ferrule is assembled with the other parts by inserting the lugs or bent ends 8 of the strips between the ferrule and handle on one side and then securing an edge of a sheet of paper between the strips 4 and 5 by means of the tongues 6. A corner 8^x of the sheet will be secured between the strips adjacent the ferrule. The opposite corner 10^x on the long side of the sheet will be secured between the strips at their bends 10, and the corner 11 of the sheet will be secured adjacent the lugs 9, which will be entered between the ferrule and handle on the side opposite the lugs 8.

15 denotes a break or cut which may, if desired, be provided in the edge of the paper to facilitate its attachment to the frame, which is bent into an approximately circular form, as required for connecting lugs 8 and 9 to the handle. The overlapping lower parts of the funnel can be made to adhere to each other by means of its adhesive 16.

In use the catcher can be moved rapidly with the wide mouth of the funnel in advance. The majority of insects drawn into the funnel will strike its outer inclined wall 17 and be entangled by its adhesive surface and practically none will escape, the aperture 18 being comparatively small and having its approaches on all sides provided with a sticky surface. The opening 18 is practically important to permit comparatively free passage of air, thereby avoiding an air-cushion that would enable insects to escape. The arrangement of the side 17 at approximately right angles to the path of the funnel when swung by its handle through the air, though not essential, is preferred.

The frame made substantially as set forth is adapted for use with the well-known sheets of fly-paper already in general use; but obviously sheets having other forms and proportions could be employed, the present form being preferable mainly for commercial reasons. The bend 10 in the frame adapts it for use with rectangular sheets; but such bend could be omitted in case sheets having suitably-curved edges were employed. Fresh

sheets can be substituted when desired, the construction being such that the frame is detachable and its parts separable.

The handle of the frame illustrated is not essential in all cases, and, if desired, the funnel having an inner adhesive surface may be moved through the air to catch winged insects by any known or practicable means. Although a frusto-conical form is specified, it is obvious that the particular shape is not essential, provided a wide entrance and a comparatively narrow exit for air are provided.

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

1. In an insect-catcher, a funnel provided with an adhesive interior, and means for moving it through the air, said funnel having the form of a frustum of an oblique cone with its longer side immediately opposite the mouth of the funnel and directly in the path of insects caught by moving the funnel, and its shorter side arranged at approximately a right angle to the handle.

2. In an insect-catcher, a funnel made of folded fly-paper with an adhesive interior, means for moving it through the air, a frame to hold the funnel and connect it to the handle, the funnel being detachable from the frame, and means for detachably securing the funnel to the frame whereby a used funnel may be removed and a fresh funnel readily substituted in said frame.

3. In an insect-catcher, a funnel provided with an adhesive interior, means for moving it through the air, and a frame, said frame comprising strips to embrace the edge of the funnel on opposite sides thereof.

4. In an insect-catcher, a funnel provided with an adhesive interior, means for moving it through the air, and a frame, said frame comprising flexible strips to embrace the edge of the funnel on opposite sides thereof.

5. In an insect-catcher, a funnel provided with an adhesive interior, means for moving it through the air, and a frame, said frame comprising flexible strips to embrace the edge of the funnel on opposite sides thereof, the funnel being formed of an angular sheet and the strips bent to aline with the corner of the angular sheet.

6. In an insect-catcher, a funnel provided with an adhesive interior, means for moving it through the air, and a frame, said frame comprising flexible strips to embrace the edge of the funnel on opposite sides thereof and provided with lugs to detachably connect it to a handle.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWARD N. WOOD.

Witnesses:

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