J. T. PLUMER.

FLY AND MOSQUITO DESTROYER.

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1,036,331.

Patented Aug. 20, 1912.

Fig. 1.

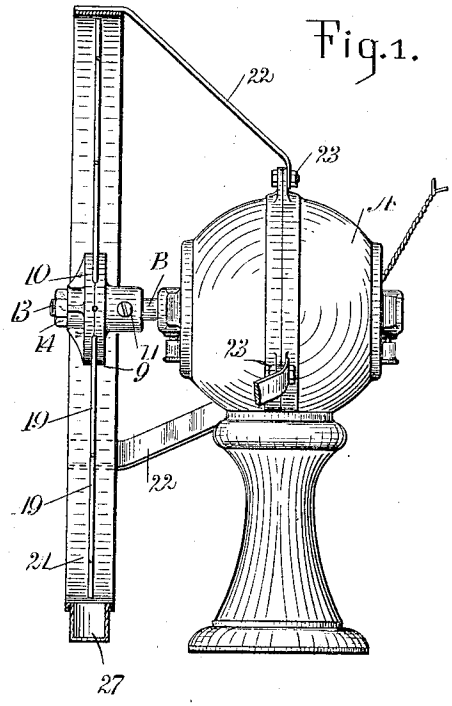

Fig. 2.

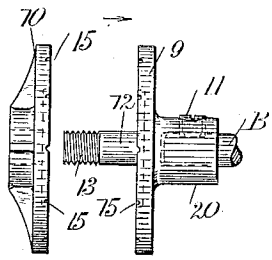

Fig. 3.

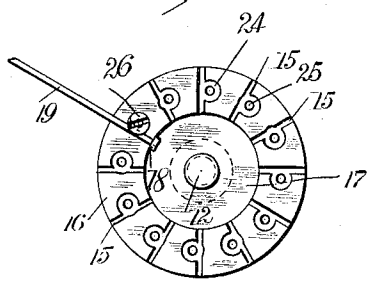

Fig. 4.

WITNESSES

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JAMES T. PLUMER, OF YALE, KENTUCKY.

FLY AND MOSQUITO DESTROYER.

1,036,331. Specification of Letters Patent. Patented Aug. 20, 1912.

Application filed June 20, 1911. Serial No. 634,249.

To all whom it may concern:

Be it known that I, JAMES T. PLUMER, a citizen of the United States, and a resident of Yale, in the county of Bath and State of Kentucky, have invented a new and Improved Fly and Mosquito Destroyer, of which the following is a full, clear, and exact description.

The principal object which the present invention has in view is to provide a mechanical device to rapidly rotate invisible whip-like members across a passage to strike and so destroy flies, mosquitos or other winged insects when in flight.

With this object in view the invention consists in installing on an electric or other fast running motor, and on the shaft thereof, a number of whip-like radially disposed members the movement whereof by the motor results in concealing or obliterating from sight the said members.

One embodiment of the present invention is disclosed in the structure illustrated in the accompanying drawings, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a side view of an electric motor provided with an insect destroying device constructed and arranged in accordance with the present invention, the protecting ring for the whips being shown in section; Fig. 2 is a side view of an end fragment of the driving shaft of the motor, showing in conjunction therewith the holding plates for the whips; Fig. 3 is a face view of one of the whip holding plates as seen from the direction indicated by the arrow lines in Fig. 2; and Fig. 4 is a detail view of one of the whips employed in the present invention.

As shown in the accompanying drawings, the letter A designates an electric motor of usual construction, on the driving shaft B of which are mounted the holding plates 9 and 10. The plate 9 is fixedly secured to the driving shaft B by means of a set screw 11. The said plate is provided with a screw threaded stud extension 12, the forward end section 13 whereof is provided with a screw thread for engagement by a nut 14. The plates 9 and 10 are provided with a series of radially disposed grooves 15. The grooves 15 are cut in a pad-like section 16 adjacent the periphery of the plates 9 and 10. Between the stud 12 and the pad section 16 the hollowed section 17 forms an interior channel adapted to receive the head 18 of the whip 19. The grooves 15 are provided to form holding sections for the whips 19.

The whips 19 are constructed from semi-flexible wire, such as piano wire. The length of the whips 19 varies to suit condition of operation. The whips are mounted in the plates 9 and 10 by placing a whip in each of the grooves 15, the plates 9 and 10 being separated sufficiently to pass the heads 18 of the said whips which rest within the channel formed by the hollowed sections 17. When the proper number of whips 19 are thus installed the plate 10 is closed on the plate 9 and the nut 14 is set up on the threaded section 13 of the stud 12. The combined plates, with the whips 19, are then mounted upon the shaft B by inserting the hub 20 of the plate 9 over the end of the said shaft and setting the screw 11 up against the said shaft.

It is to fend against the insertion of the fingers or hand of an onlooker from contact with the flying whips 19 that I have provided the ring 21. The ring 21 is supported by means of the strap brackets 22, which are secured by means of the bolts 23 to the frame of the motor A.

When the current is turned on the motor A and driving shaft B therefor, plates 9 and 10, and the whips 19 are rapidly rotated. The rapidity of the rotation is such that the whips are rendered invisible, and to all intents and purposes the passage through the ring 21 is an open space. The apparatus is placed in an open passageway, such as an open window, through which the flies and mosquitos move. When the insect undertakes to pass through the center of the ring 21 it is struck down by one of the flying whips 19. If desired, the apparatus may be baited by disposing some inviting substance at one side of the flying whips, to reach which the insect would naturally pass through the ring 21. In making the attempt to pass the ring 21, as above stated, the insect is destroyed by being struck by one of the flying whips.

To provide for holding the whips 19 in position while the same are being mounted on the plate 10, the said plate is provided with a number of recesses 24 disposed at one side of the groove 15. Within the recesses 24 are provided perforations 25 which are

tapped to receive holding screws 26. The screws 26 are of the character having a large flat head, which, when the screws are set up in the perforations 25 overlay the whips 19, as shown in Fig. 3 of the drawings.

When the insects are struck by the whips 19 they are normally driven against the side of the ring 21. At the bottom of the ring 21 I form a box-like receptacle 27. The vibration of the machine serves to move the insects downward over the side of the ring 21 for deposit within the box-like receptacle 27. The receptacle 27 is removably attached to the ring 21, being inserted through an opening formed therein.

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

1. A fly and mosquito destroyer such as described, having a rotatable member; means for rotating said member; a plurality of radially extended whips; and a ring surrounding said whips in line therewith to catch an insect when thrown outward by said whips.

2. A fly and mosquito destroyer such as described, having a rotatable member; means for rotating said member; a plurality of radially extended whips; a ring surrounding said whips in line therewith to catch an insect when thrown outward by said whips; and a box-like receptacle disposed at the bottom of said ring and in open communication with the interior of said ring.

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

JAMES T. PLUMER.

Witnesses:
T. J. YOUNG,
O. B. RACKE.