No. 837,136. PATENTED NOV. 27, 1906.

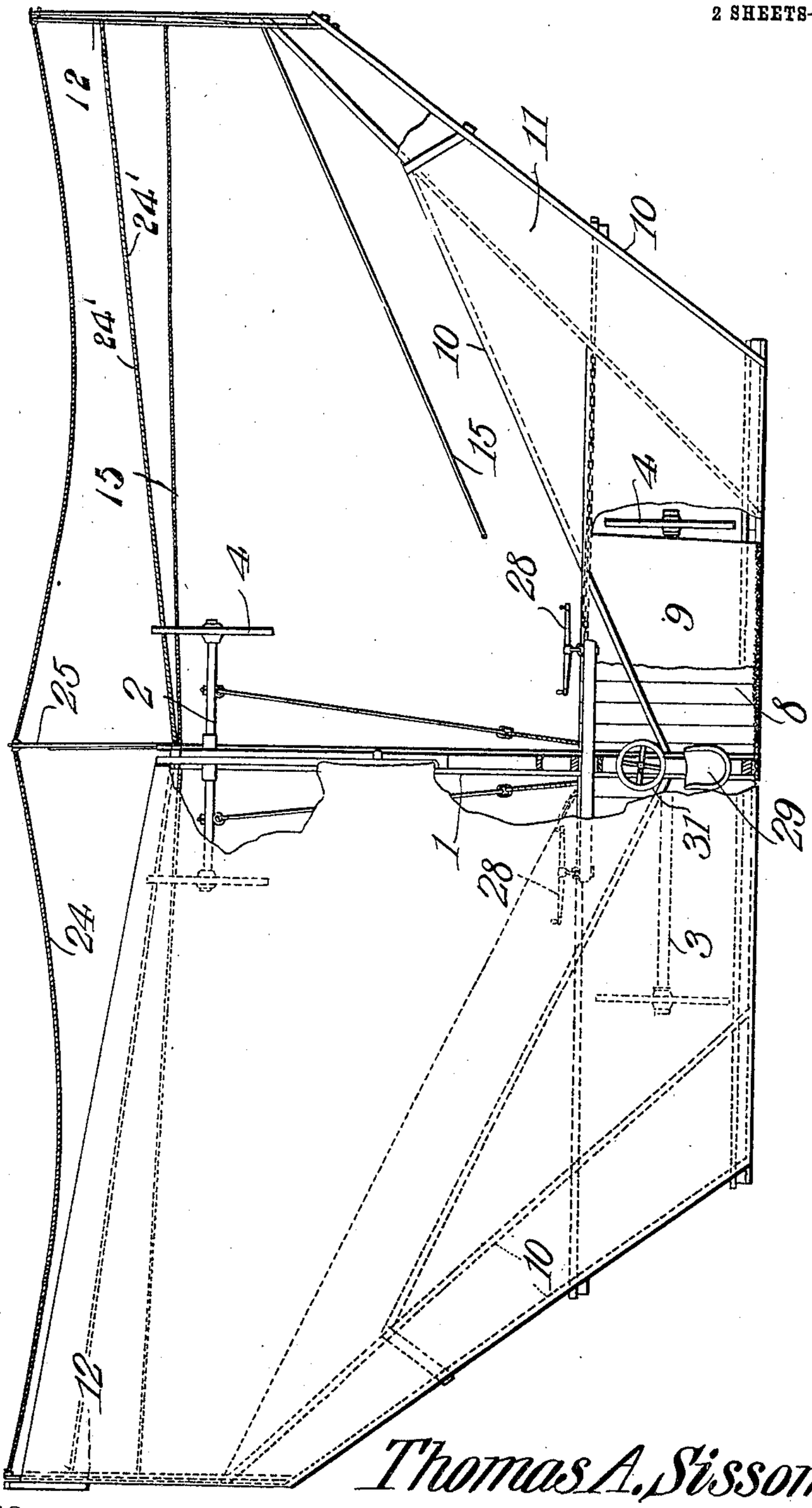
T. A. SISSOM.

INSECT DESTROYER.

APPLICATION FILED SEPT. 21, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES:

E. G. Steinmetz

Hubert D. Lawson.

Thomas A. Sissom,

INVENTOR.

By Church & Co.

ATTORNEYS

No. 837,136. PATENTED NOV. 27, 1906.

T. A. SISSOM.

INSECT DESTROYER.

APPLICATION FILED SEPT. 21, 1906.

2 SHEETS—SHEET 2.

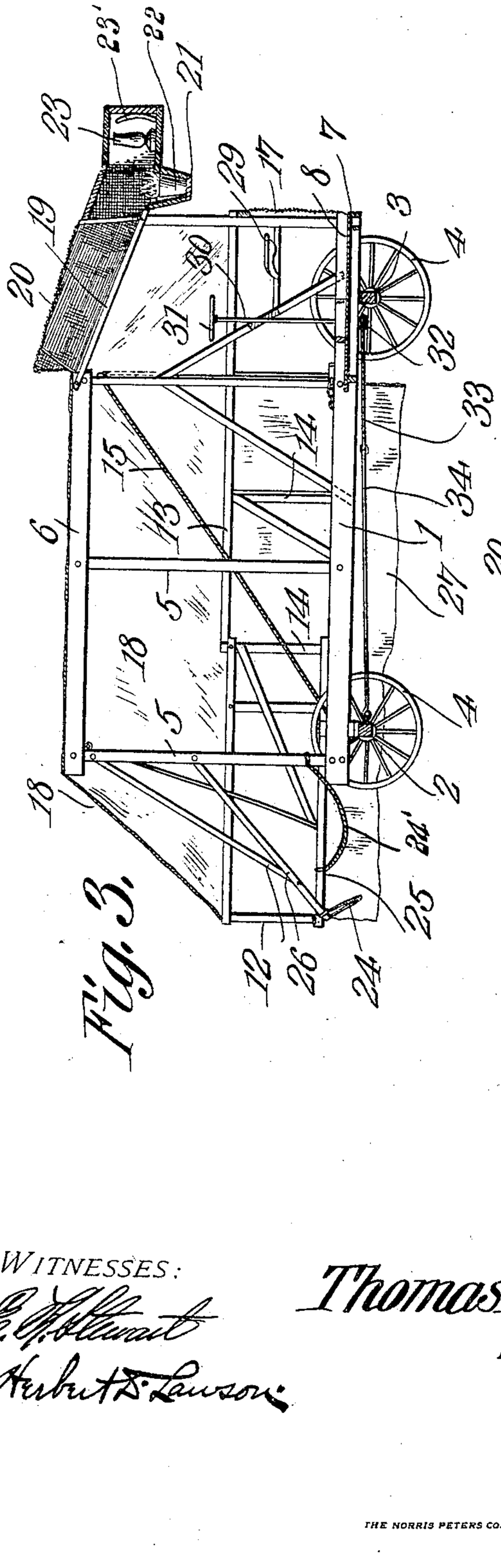


Fig. 3.

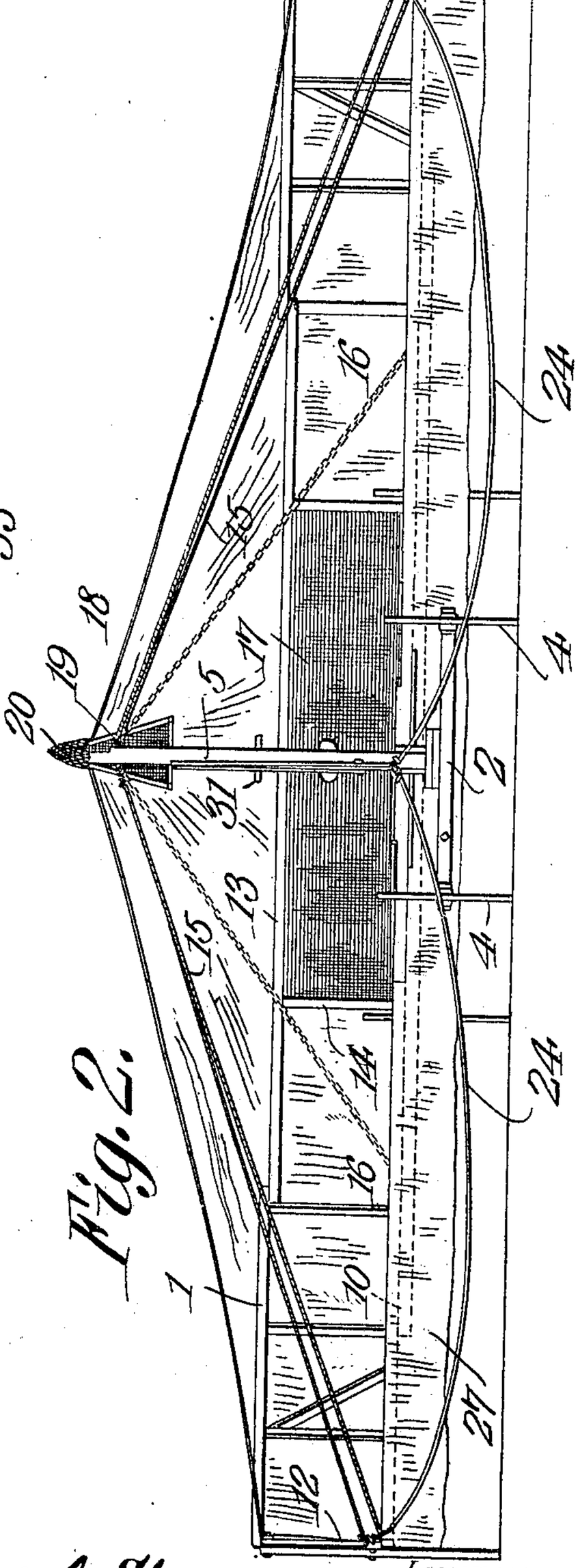


Fig. 2.

WITNESSES:

E. G. Holland

Herbert D. Lawson.

Thomas A. Sissom,

By Cushman & Co.

ATTORNEYS.

INVENTOR.

UNITED STATES PATENT OFFICE.

THOMAS A. SISSOM, OF ITALY, TEXAS.

INSECT-DESTROYER.

No. 837,136. Specification of Letters Patent. Patented Nov. 27, 1906.

Application filed September 21, 1906. Serial No. 335,624.

To all whom it may concern:

Be it known that I, THOMAS A. SISSOM, a citizen of the United States, residing at Italy, in the county of Ellis and State of Texas, have invented a new and useful Insect-Destroyer, of which the following is a specification.

This invention relates to machines for gathering insects; and it is particularly adapted for use upon cotton-plantations for removing the moths which produce the boll-worm so destructive to cotton-plants.

The object of the invention is to provide a structure which can be easily drawn over cotton-plants and which is in the form of an elongated hood. Means are provided whereby the cotton-plants will be agitated by the near approach of the machine, so as to dislodge the moths.

Another object is to provide means for attracting the moths into the hood as soon as dislodged and for directing them toward a torch or other device where they are destroyed.

With the above and other objects in view the invention consists of a vehicle-frame having laterally-extending wings of desired proportions formed with light textile floors or platforms, and a hood or cover extends thereover and for some distance from the frame. The space between the cover and platform is closed at the back except at the center, where screens or panes of glass are disposed. An outlet-trap is disposed at the top of the cover and a torch is arranged at the outlet end thereof.

The invention also consists of certain other novel features of construction and combinations of parts, which will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a plan view, one-half of the cover being removed to show the interior of the machine. Fig. 2 is a front elevation, and Fig. 3 is a central longitudinal section.

Referring to the figures by characters of reference, 1 is a central longitudinal beam mounted on front and rear axles 2 and 3, carried by traction-wheels 4. This beam supports uprights 5 and a top beam 6, and extending laterally from the rear portion of the beam 4 is a light frame 7, carrying directly between the rear wheels 4 a platform 8, of wood, while the remainder of said frame is covered with canvas or other fabric 9. Beams 10 extend forward from the ends of the platform at obtuse angles thereto, and canvas 11 is stretched thereover to form a continuation of the platform 8. Forwardly-projecting extension-frames 12 are arranged at the forward or outer ends of the wings and are supported upon the beams 10 of the wings and by upper beams 13, which are held above the beams 10 by means of standards 14. Frames 12 are rigidly connected to the beams 10 and 13 and are supported from the top beam 6 by means of guys 15, which serve to prevent the ends of the wings and the extension-frames from sagging. The space between the beams 10 and 13 is closed with a dark fabric 16, which is also extended throughout the width of the machine, said walls being continuous except directly in rear of the central portion of platform 8, where a wire-netting 17 is substituted therefor.

The top beam 6 extends forward beyond the front axle 2, and arranged thereon is a hood or cover 18, made, preferably, of a dark fabric, which is extended over the extension-frames 12 and the rear walls of the wings and platform, said cover of course extending downward toward the rear of the machine. Arranged on the cover at the center of the rear portion thereof is an elongated outlet 19, over which is secured an outlet-flue 20, preferably formed of wire fabric and extending beyond the rear wheel of the machine. A receptacle 21 is supported below the rearwardly-projecting portion of the flue and is adapted to hold a torch 22 of any suitable form. Arranged in rear of and above the torch is an oil-lamp 23, in rear of which is disposed a reflector 23′. This reflector is adapted to direct the rays from the lamp through the elongated outlet 19, so that it will be plainly visible to the insects when they enter the machine. A rope 24 is secured at its ends to the front portions of the extension-frames 12, and its central portion is preferably supported by a forwardly-extending arm 25, having braces 26 connecting it with one of the standards 5. This rope 24 is loose, so as to drag over the plants and dislodge the moths thereon. Another rope 24′ extends from the frames 12 and is secured to the front upright at a suitable distance above the frame. This rope coöperates with the rope 24 for the purpose of agitating the plants and

starting the insects from them. A curtain 27, formed of any suitable fabric, is suspended from the front edges of the platform 8, and the wings and extension-frames of this curtain are adapted to prevent the insects from escaping under the machine and toward the rear thereof.

Swingletrees 28 are disposed at opposite sides of the beam 1 at a point adjacent the rear wheels 4, so that the draft-animals will occupy positions between the two axles. A driver's seat is located upon the platform 8 directly above the beam 1, and disposed adjacent thereto is a shaft 30, adapted to be rotated by means of a hand-wheel 31. This shaft has a sprocket 32, on which is mounted a chain 33, connected, preferably by means of rods 34, with the front axle 2 at opposite sides of the pivot.

In using this machine the draft-animals are harnessed therein and driven forward. The ropes 24 and 24′ will drive over the plants and shake them so as to dislodge the moths, which will fly upward and under the cover 18. This cover will deflect them toward the rear end of the machine, and as the apparatus is intended to be used at night the light directed through the opening 19 of the deflector 23′ will attract them through the opening 19 and above the torch 22, which will destroy them. It will be understood, of course, that the machine may, if desired, be used during the day, at which time the light appearing through the screen 17 will serve to attract the insects; but as they cannot escape through it they will pass upward through the outlet-opening 19 and into the torch. The curtain 27 prevents the insects from escaping under the machine, and the rear walls by reason of their peculiar contour serve to deflect the insects toward the center as the machine advances. The machine will be found to be very effective in collecting and destroying moths, and by using it at the proper season the cotton can be kept clear of the pest known as the "boll-worm."

The preferred form of the invention has been set forth in the foregoing description; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of the claims.

What is claimed is—

1. A machine of the character described comprising a movable platform having forwardly-projecting lateral extensions, a cover supported above the platform and extensions, walls disposed between the cover and the platform and its extensions, a portion of said walls adapted to admit light therethrough, and an outlet-trap carried by the cover.

2. A machine of the character described comprising a movable platform, a cover supported thereby, walls closing the space between the platform and cover at the rear thereof, and an outlet-trap carried by the cover.

3. A machine of the character described comprising a movable platform having walls extending from the rear edges thereof, a cover supported above the walls and platform, one of said walls being adapted to admit light, and an outlet-trap carried by the cover adjacent the center thereof, said walls and cover being adapted to deflect the insects toward the trap.

4. A machine of the character described comprising a portable frame having a laterally and forwardly extended platform, upstanding walls along the rear edges of the platform, a cover above the platform and walls, and an outlet-trap carried by the cover, that portion of the walls adjacent said trap being adapted to admit light therethrough.

5. A machine of the character described comprising a portable frame having a platform, an upstanding wall at the rear edge of the platform adapted to permit the passage of light, laterally and forwardly extending wings projecting from the platform, upstanding light-proof walls at the rear edges thereof, a top beam supported above the frame, supporting devices extending from said beam to the wings, a cover supported by the top beam and by the walls of the machine, and an outlet-trap carried by the cover and adjacent the rear wall of the platform.

6. In a machine of the character described the combination with a portable frame; of a laterally and forwardly extending platform carried thereby, extension-frames projecting from the platform, walls upstanding from the platform, said frames constituting continuations thereof, a cover supported above the removable frame and inclined downward to the walls, an outlet-trap carried by the cover, means connecting the wings for agitating plants in the path of the machine, and a curtain suspended from the platform for contacting with the plants.

7. A machine of the character described comprising a portable frame closed at the top, sides and back, the back of said frame being adapted to admit light, a curtain suspended from the front of the frame for contacting with plants, means connected to the frame for agitating plants, and an outlet-trap carried by the top of the frame.

8. A machine of the character described comprising a portable frame having laterally and forwardly extending wings, an outlet-trap supported above the frame, means carried by the wings and frame for deflecting insects into the outlet-trap, a curtain suspended over the platform and wings, and a plant-agitating device carried by the wings.

9. A machine of the character described

comprising a portable frame closed at the top, sides and bottom, said top having an outlet-opening, a flue extending from said opening, a lamp within the flue, means for directing light from the lamp through the outlet-opening, and a torch disposed below and in front of the lamp.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS A. SISSOM.

Witnesses:

J. T. WOLANER,

WHIT GEORGE.