

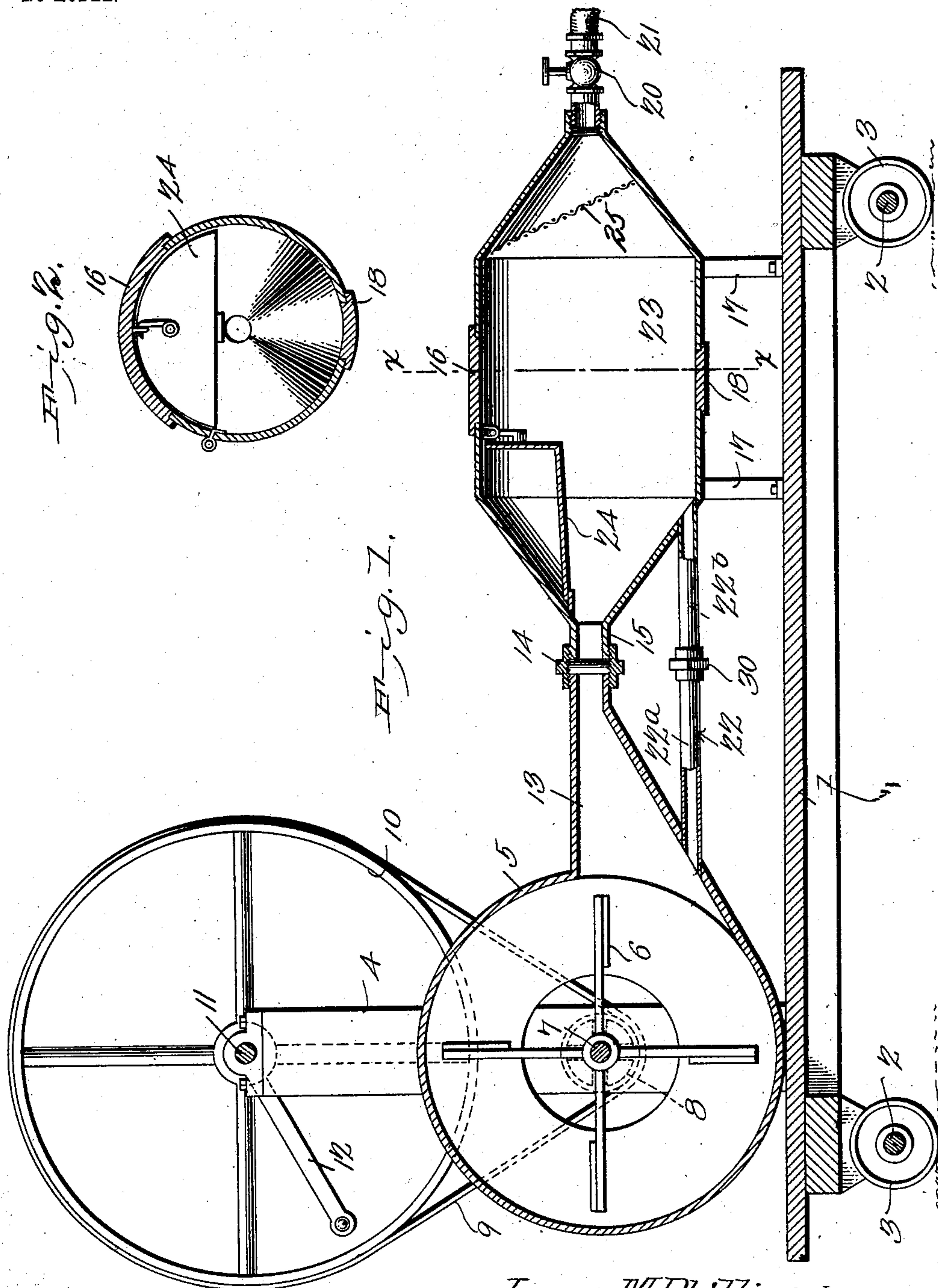
No. 720,282.

PATENTED FEB. 10, 1903.

J. M. PHILLIPS.
VERMIN DESTROYER.

APPLICATION FILED JULY 28, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES M. PHILLIPS, OF MASON, TEXAS.

VERMIN-DESTROYER.

SPECIFICATION forming part of Letters Patent No. 720,282, dated February 10, 1903.

Application filed July 28, 1902. Serial No. 117,370. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. PHILLIPS, a citizen of the United States, residing at Mason, in the county of Mason and State of Texas, have invented a new and useful Vermin-Destroyer, of which the following is a specification.

This invention relates to vermin-destroyers, such as are used for exterminating prairie-dogs or ground-squirrels and other burrowing animals, as well as insects, such as ants, and it has particular reference to that class of devices which are specifically known as "fumigators" and in which the destruction of the pests is effected by means of noxious smoke or vapor.

My invention has for its object to provide a device of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view my invention consists in the improved construction, arrangement, and combination of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a vermin-destroyer constructed in accordance with my invention. Fig. 2 is a detail sectional view taken on the line *x x* in Fig. 1.

Corresponding parts in the figures are indicated by like numerals of reference.

My improved vermin-destroyer is usually and preferably mounted upon a platform 1, having axles 2 and supporting-wheels 3, whereby it may be readily transported from place to place. Uprights 4 support a fan-case 5, containing a fan or blower 6, the shaft of which, 7, is provided with a pulley 8, connected by a belt or band 9 with a drive-wheel 10, suitably mounted upon a shaft 11, supported between the uprights 4 above the fan-case. In order to bring the parts closely together, the drive-wheel may be set to one side of the fan-case, as shown in the drawings; but this is not necessary, although desirable in order to economize space. The shaft 11 is equipped with a crank 12, by means of which it may be operated.

The fan-case 5 is provided with a tapered spout 13, the front end of which is connected, by means of a union 14, with a short pipe 15,

extending from the rear end of the fire-box. The latter is preferably constructed with tapering ends, as clearly shown in the drawings, and it is provided on its upper side with a door 16, through which fuel and ingredients, such as sulfur, calculated to develop noxious odors may be placed in the fire-box. The latter, which is supported upon legs 17, is provided on its underside with a door 18, through which its contents may be removed when desired. The tapering front end of the fire-box has a forwardly-extending pipe provided with a valve 20. To this pipe is attached a flexible hose 21, which may be inserted into the burrows of the animals to be exterminated, it being found necessary to inject the noxious vapor at a point as close as possible to the lower ends of the burrows in order to achieve the best results.

The spout or nozzle 13 of the fan-case is connected with the fire-box 23 near the lower end of the latter by means of a small pipe 22, composed of separate sections 22^a 22^b, connected, respectively, with the nozzle 13 and the fire-box 23 and having their ends separately connected by means of a union 30. This pipe is for the purpose of supplying an upward draft through the fuel placed in the fire-box. Suitably located within and detachably connected with the fire-box is a shield or guard 24, having a horizontal portion disposed directly above and adjacent to the blast-opening, which serves to deflect the blast from the fan-spout upon the coals within the fire-box in order that the vapors developed by the noxious ingredients placed thereon may be blown direct to the exit-pipe. Suitably arranged within the fire-box, in rear of the exit-opening, is a perforated screen 25, which will prevent the solid contents of the fire-box, such as coals, from being blown into the exit-pipe. This screen, it will be seen, is disposed in the conical or tapering portion of the fire-box and in an inclined position. Being thus arranged, it may be made of an area greatly exceeding that of the discharge-pipe, and it will thus perform its intended function with less liability to become choked than if disposed over the opening of the exit-pipe only.

The operation of this device and its advantages will be readily understood from the

foregoing description, taken in connection with the drawings hereto annexed. It will be noticed that by unscrewing the unions 14 and 30 the fire-box may be detached whenever desired in order to repair it or to replace it with a new one in case it should be burned out. Suitable braces and supports for the parts of the device are obviously provided wherever necessary. The device is extremely simple and may be constructed at a small expense, while it will be found extremely effective in exterminating vermin of a class which, as a rule, is difficult to reach.

By closing the valve in the exit-pipe the device may be transported from one place to another without the possibility of the noxious odors escaping from the fire-box and annoying the operator or operators.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a device of the class described, a fire-box having tapering, conical ends, a fan-case having a tapering spout, a union connecting said spout with the rear end of the fire-box, an auxiliary jointed pipe connecting the bottom of the fire-box with the tapering spout of the fan-case, and a deflecting-shield within

the fire-box at the rear end thereof and having a horizontal portion directly above the discharge of the fan-spout.

2. In a device of the class described, a fire-box having tapering conical ends connected at one end with a blower and at the opposite end with a valved discharge-pipe, in combination with a perforated partition disposed within said fire-box at a distance from the discharge end thereof and of an area greatly exceeding that of the discharge-pipe.

3. In a device of the class described, a wheeled platform, a fan-case and a fire-box mounted upon said platform, a union connecting the discharge-spout of the fan-case with the fire-box, an auxiliary jointed pipe connecting the lower end of the fire-box with the discharge-spout of the fan-case, a deflector and a perforation within the fire-box, and a valved discharge-pipe for the latter.

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

JAMES M. PHILLIPS.

Witnesses:

S. V. WOOD,
D. H. MEEK.