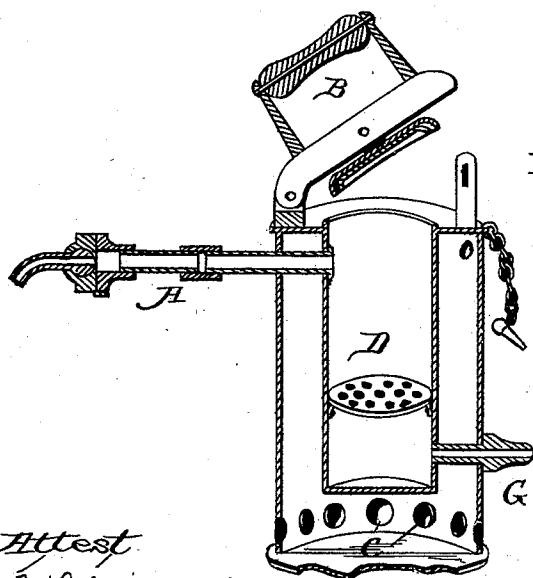
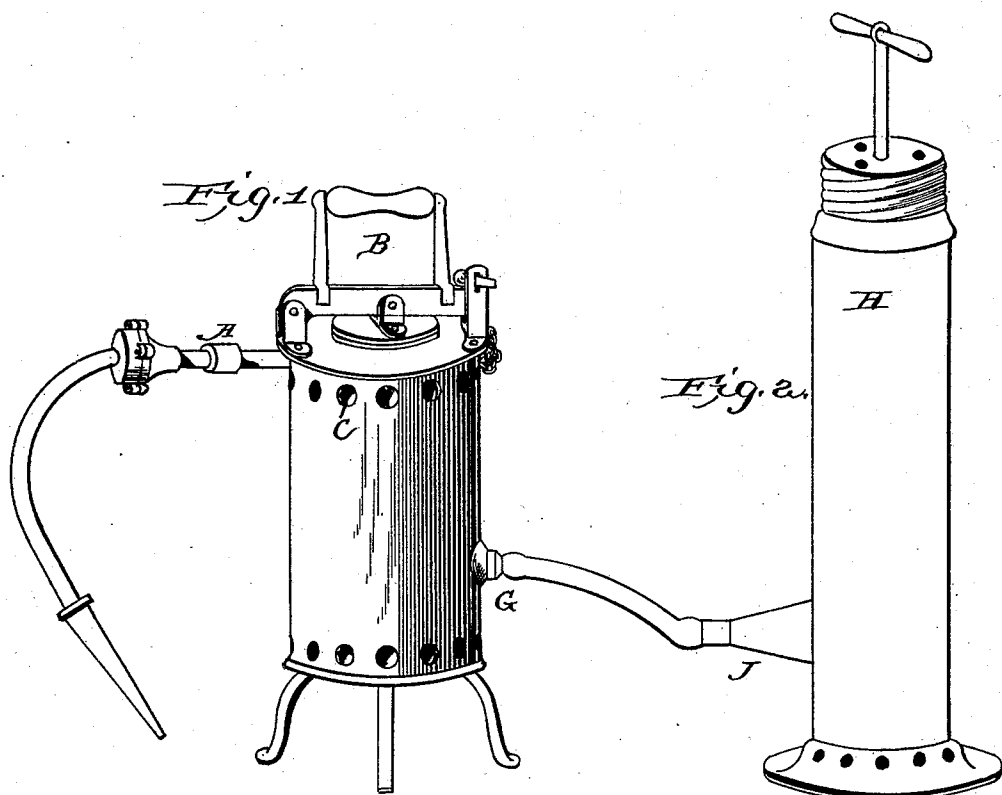


(No Model.)

A. GUBBA.
ANT DESTROYER.

No. 578,450.

Patented Mar. 9, 1897.



Attest
F. L. Marshall
C. S. Madden

Inventor
Antonio Gubba
by Richardson
Atty

UNITED STATES PATENT OFFICE.

ANTONIO GUBBA, OF BUENOS AYRES, ARGENTINA.

ANT-DESTROYER.

SPECIFICATION forming part of Letters Patent No. 578,450, dated March 9, 1897.

Application filed September 26, 1895. Serial No. 563,793. (No model.) Patented in Uruguay August 2, 1894, No. 101; in Brazil March 25, 1895, No. 1,838; and in Argentina July 25, 1895, No. 1,563.

To all whom it may concern:

Be it known that I, ANTONIO GUBBA, a citizen of Argentina, and a resident of Buenos Ayres, Calle Cuyo, No. 536, have invented a new and useful Improvement in Ant-Destroyers, (for which patents have been obtained in the Argentine Republic, No. 1,563, dated July 25, 1895; Uruguay, No. 101, dated August 2, 1894, and Brazil, No. 1,838, dated March 25, 1895,) of which the following is a specification.

Having for a long time carefully studied the method of destroying ants, hares, or moles and other insects and animals which cause great damage to growing agriculture, I have devised an apparatus and certain ingredients for destroying such insects and animals.

In the accompanying drawings, Figure 1 is a perspective view of the improved apparatus. Fig. 2 is a view of the pump, and Fig. 3 is a sectional view of the heater.

A is a tube, made of any suitable material, provided with a bronze coupling, which prevents the corrosion or wear and tear caused by the action of heat passing through its interior and facilitates the movements which are necessary to carry out its application to the holes or cavities where the apparatus is to be operated.

In Fig. 1 the heater is shown in perspective, with an air-tight closure or cover B.

C shows the air-openings, and G indicates the tube communicating with the air-pump through a rubber tube, as shown in Fig. 2. The outer casing includes an inner drum D, communicating with the tube A, conveying the smoke to the ant-destroyer, and the series of vent-holes which isolate the heat radiated from the interior furnace. The ingredients are introduced into the drum D.

The tube in case of necessity may connect with an air-pump or bellows for the impulsion or impelling of the smoke. This is merely an incidental application, as the employment of these means for the impulsion of the smoke is not strictly necessary, as will be seen farther on in the description of the ingredients.

By the construction described I prevent the escape of noxious or toxic gases and their aspiration by the operator, and it is not necessary to use bellows or air-pumps for impelling the smoke, as the combustion of the cartridge,

produces a pressure of gases which causes the smoke to take the only channel there is through the pipe A. Further, the cartridge, while accelerating the introduction of the smoke into the ant-hill or other cavities where it is to be operated, prevents any possible interruptions which might be caused through negligence in the use of a bellows or pump, and also the danger, mentioned above, of the aspiration of the toxic gases by the operator.

The lozenge or cartridge, as the case may be, consists of the following substances: arsenic, (as its principal component,) chlorate of potassium, antimony, sulfur, and nitrate of potassium.

The cartridge or lozenge thus composed is perfectly combustible, and as soon as the match is applied to its extremity is burned, owing to the sulfur, antimony, and chlorate and nitrate of potassium which it contains, and which renders impossible any explosion which might be feared because of the components entering into its preparation.

As soon as the cartridge with lighted match is deposited in the interior of the apparatus and the latter is closed and while the former is slowly burning, the operator can busy himself in covering the mouths of the ant-hills or cavities whenever he sees smoke escaping.

In case the ant-hill or cavity should be entirely covered or completely filled by the smoke there would be no danger of any kind, as the safety-valve fixed on the cover of the apparatus, as shown in Fig. 1, will prevent any possible accident.

The above description will clearly show the efficiency of my insecticide apparatus.

Favorable results may also be obtained with the apparatus by making a fire in the interior furnace and instead of the cartridge introducing a spoonful of yellow sulfid of arsenic or other suitable material, which will produce sufficient smoke to fill the subterraneous cavities by impelling the same by means of bellows or an air-pump, whereby good results are obtained.

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

In combination, in an ant-destroyer, the

outer perforated shell having an inwardly-
extending top flange, an imperforate inner
shell depending from the center of said flange,
a cross-bar provided with a handle pivoted to
5 said flange, a cover depending from said cross-
bar, and adapted to close said inner shell, and
a perforated disk adapted to receive the com-
bustible compound arranged intermediately
of said inner shell, substantially as described.

In testimony that I claim the foregoing as to
my invention I have signed my name, in pres-
ence of two witnesses, this 29th day of May,
1895.

ANTONIO GUBBA.

Witnesses:

SZO CARÉAE,
FH. HEYRA.