

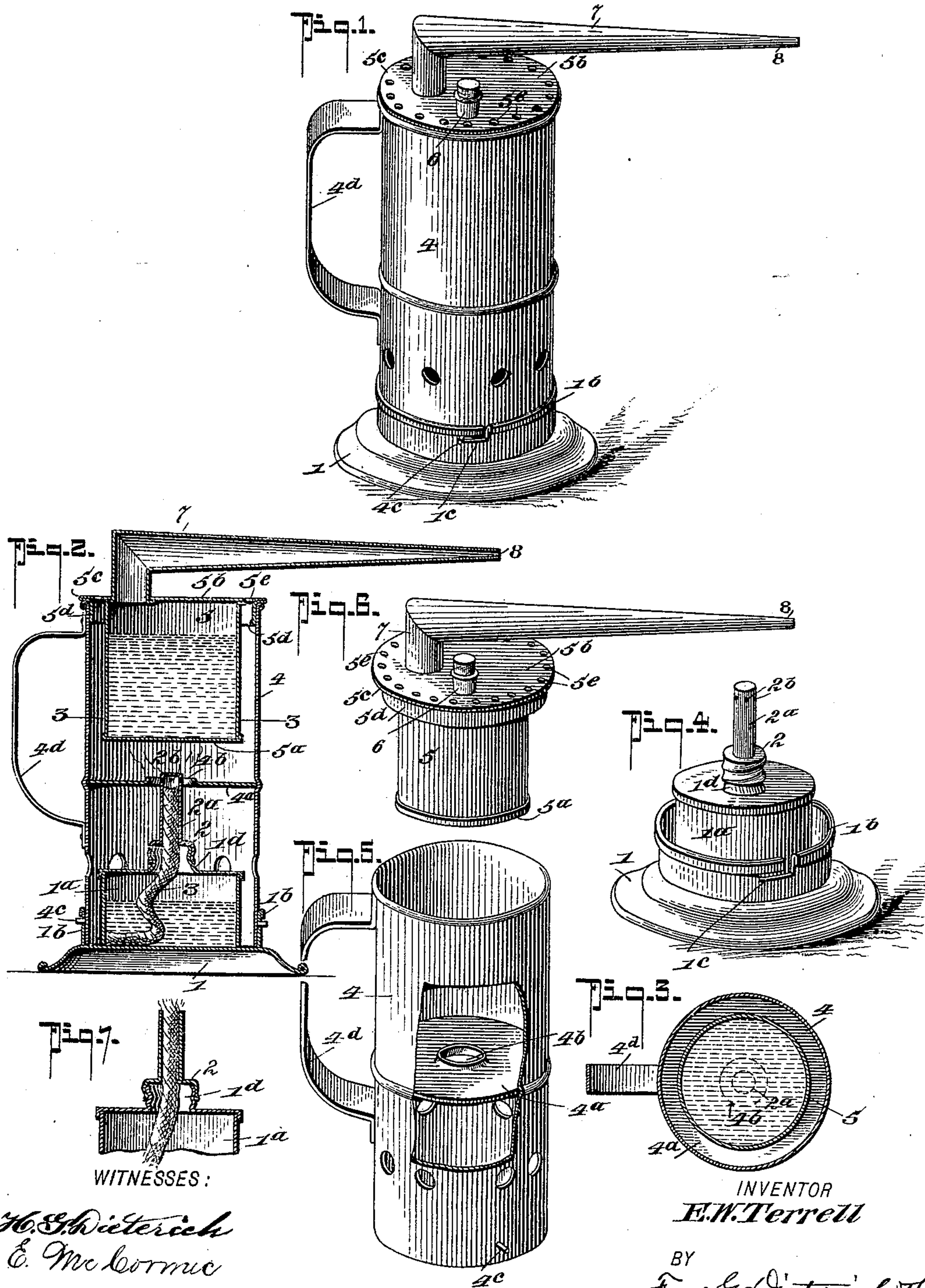
No. 620,079.

Patented Feb. 21, 1899.

E. W. TERRELL.
GERM OR INSECT EXTERMINATOR.

(Application filed Sept. 14, 1896)

(No Model.)



WITNESSES:

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EARLY W. TERRELL, OF CULLMAN, ALABAMA, ASSIGNOR OF ONE-HALF
TO A. M. PRESTON, OF SAME PLACE.

GERM OR INSECT EXTERMINATOR.

SPECIFICATION forming part of Letters Patent No. 620,079, dated February 21, 1899.

Application filed September 14, 1898. Serial No. 690,958. (No model.)

To all whom it may concern:

Be it known that I, EARLY W. TERRELL, residing at Cullman, in the county of Cullman and State of Alabama, have invented certain
5 new and useful Improvements in Germ or Insect Exterminators, of which the following is a specification.

This invention relates to improvements in that class of germ or vermin exterminators
10 having a steam-generated discharge-nozzle and a handle so arranged as to enable the user discharging the steam-jets in close corners or other points from which it is difficult to dislodge vermin by ordinary means.

15 Generally my invention comprehends a novel construction of heating-chamber and generator or holder detachably connected therewith and a detachably-combined stand and burner; and in its more specific nature it
20 comprises an improved device of the character stated embodying certain details of construction and combination of parts, all of which will be first described in detail and then be specifically pointed out in the ap-
25 pended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improvement. Fig. 2 is a vertical section of the same. Fig. 3 is a horizontal section on the
30 line 3-3 of Fig. 2. Fig. 4 is a detail of the combined base and burner portions. Fig. 5 is a detail view of the heater or body portion, parts being broken away. Fig. 6 is a detail view of the detachable generator, and Fig. 7 illustrates an oil-burner adapted to form a part of
35 my improved exterminator.

In its practical construction my improvement comprises generally three portions detachably connected with each other, the bot-
40 tom portion having a supporting base member 1, a centrally-upward-extending fluid-holder 1^a, and a flange 1^b, having bayonet-joint slots 1^c.

In the preferred construction the burner
45 comprises a screw-cap 2, adapted to fit the screw-flange 1^d of the fluid-holder, and a hollow tube 2^a, closed at the top and having jet-openings 2^b at a point below the top, as best shown in Fig. 2. This form of burner is par-
50 ticularly adapted for burning wood-alcohol, as the wick 3 can be run up to a point near the

openings 2^b to feed the volatile fluid thereto. This form of burner in use is ignited by tilting the bottom portion 1 nearly horizontal and heating the end of the tube 2^a at a point
55 below the jet-openings therein sufficient to vaporize the fluid, which is fed up to such openings by a wick, as before stated. The heater or body portion comprises a cylindrical casing 4, open at the top and bottom and di-
60 vided centrally by a horizontal division-plate 4^a, having a central combustion-opening 4^b, into which the top of the burner projects. The object in thus combining the burner with
65 the upper and lower parts of the holder 4 is to effect a more perfect combustion and generate a more intense heat against the bottom of the steam-generator chamber, as ample space is thereby provided for air circulation
70 above the burner without reducing the heat effect thereof.

The bottom portion of the holder 4 has air-inlets and a pair of lateral pins 4^c, which en-
75 gage with the bayonet-jointed slots of the base heretofore referred to, it being understood the cylindrical body 4 is of a slightly less di-
80 ameter than the flange on the base 1. The body 4 has a suitably-arranged handle 4^d.

To provide an economical construction of parts for conveniently handling the generator
80 for filling and also to arrange it so as to be quickly heated, I construct the said generator of a cup-like holder 5, of smaller diameter than the holder 4 and of a length slightly less
85 than the depth of the upper or heating chamber of such holder, so that its bottom 5^a will be disposed just over the burner.

The holder 5 has a closed top 5^b formed with an annularly-extended rim 5^c, having a
90 pendent flange 5^d, held away from the sides of the holder 5 proper to provide an escape-space for the products of combustion, which pass out through the openings 5^e of the flange or rim 5^c, the said pendent flange 5^d being of
95 a diameter to snugly fit down into the top of the holder and frictionally secure the generator in place.

The top of the generator has a plug feed-opening 6 and a steam-escape tube 7, which
100 terminates in a concaved discharge-nozzle 8, extended horizontally or otherwise, as may be desired.

From the foregoing description it will be readily seen that the generator portion can be readily filled and placed in position within the holder, and by reason of the central apertured diaphragm the heat of the burner will be concentrated within the heat part of the holder 4, and thereby quickly heat the water within the holder 5 and generate steam. By making the burner portion detachable access to the burner proper can be conveniently had.

While I have shown and described a burner particularly adapted for consuming wood-alcohol, it is obvious an ordinary oil-burner, such as is illustrated in Fig. 7, may be used in lieu thereof.

By dividing the holder 5 into an upper and lower portion, as stated and shown, and forming the lower part with air-inlets and the annular rim of the detachable holder 5 with combustion-outlets a perfect air-feed is provided to create a proper combustion of the heater fluid.

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

1. An insect-exterminator, comprising a base carrying a fluid-holding chamber and a burner; a body portion open at the top and having a centrally-apertured diaphragm, said body having air-inlets at a point below the diaphragm; and a generator comprising a liquid-holder of less diameter than the body portion, whereby surrounding heat-spaces are provided; said generator having an annularly-enlarged flange provided with combustion-discharge openings near its perimeter and having at its perimeter a pendent flange adapted to frictionally engage the upper end of the body portion, said generator

having a steam-discharge nozzle and an inlet substantially as shown and described.

2. An insect-exterminator, comprising a base portion having an upwardly-extending fluid-holding chamber provided with a detachable burner, said base member having bayonet-joint slots; a cylindrical body portion adapted to fit in the base and having lugs to engage the bayonet-joint slots of such base, said body portion having a handle and a diaphragm centrally apertured; a generator comprising a hollow body of less diameter than the body portion and of less depth than the upper or heat space of such body portion, said generator having an annularly-extended rim having combustion-discharges near its perimeter and provided with a pendent annular flange adapted to frictionally engage with the upper end of the body portion, said generator being also provided with a steam-ejecting nozzle and a plug feed-opening, all being arranged substantially as shown and described.

3. An insect-exterminator, comprising a body portion; a suitable base; a generator detachably held in the upper end of the body portion provided with a steam-ejector and feed-opening; a volatile-fluid-holding chamber forming a part of the base having a screw-cap feed-opening and a burner to be closed at the top adapted to be detachably connected onto such feed-opening of the fluid-chamber and having orifices adjacent its upper or closed end, all being arranged substantially as shown and described.

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Witnesses:

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