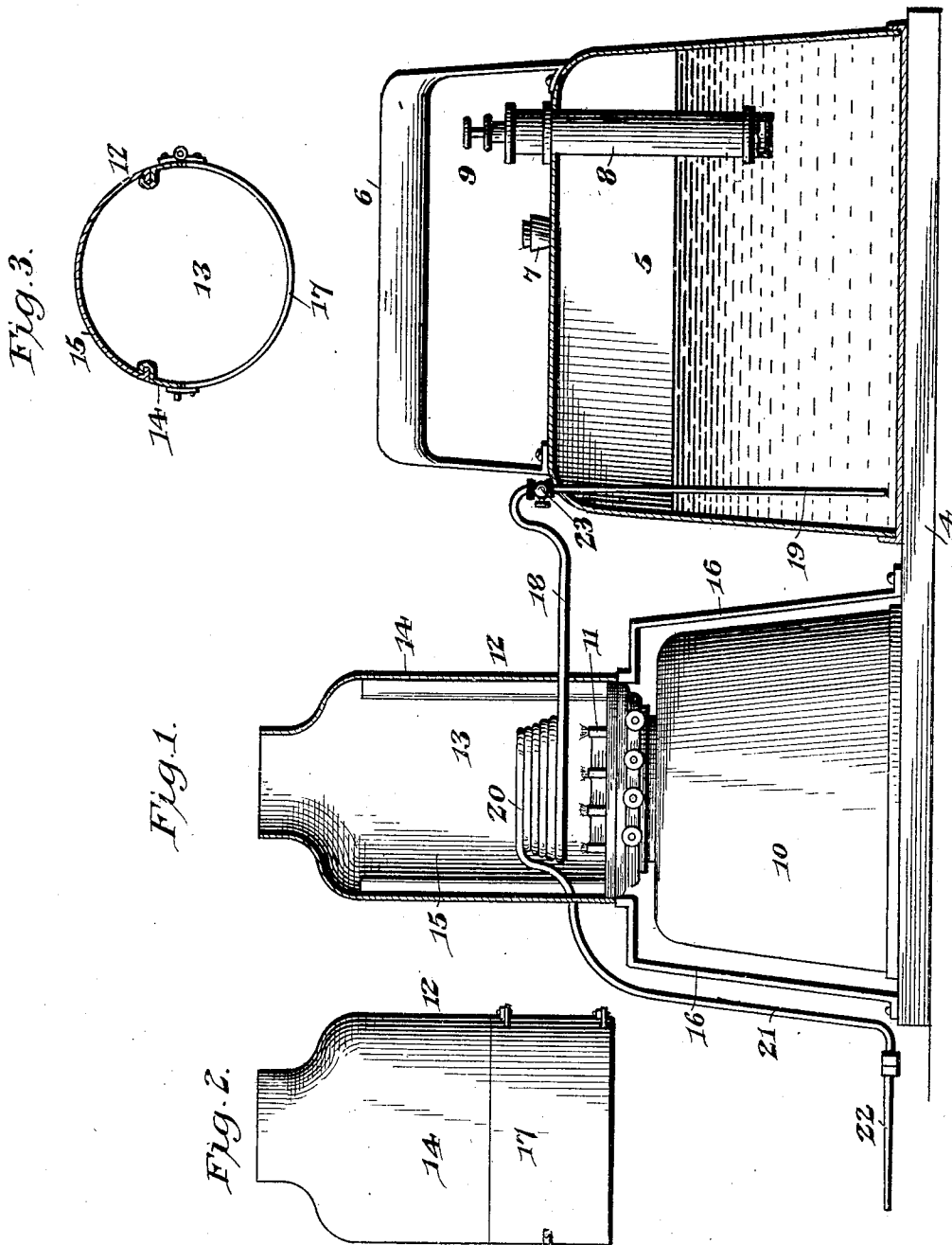


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PATENTED MAR. 6, 1906.

J. D. HARRIS.
EXTERMINATOR.

APPLICATION FILED SEPT. 10, 1904.



James D. Harris Inventor

Witnesses
Jas. E. McCathran
B. H. Foster

By

E. G. Siggers

Attorney

UNITED STATES PATENT OFFICE.

JAMES D. HARRIS, OF ATLANTA, GEORGIA, ASSIGNOR OF ONE-HALF TO
WILLIAM E. WIMPY, OF ATLANTA, GEORGIA.

EXTERMINATOR.

No. 814,131.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed September 10, 1904. Serial No. 224,005.

To all whom it may concern:

Be it known that I, JAMES D. HARRIS, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Exterminator, of which the following is a specification.

This invention relates to means for exterminating those insects—such, for instance, as bedbugs, roaches, and the like—which inhabit cracks, crevices, or other small crannies.

The object is to provide a novel, simple, and handy implement which will generate dry steam and will permit the direction and introduction of such steam into the places harboring the insects and their eggs, so that both will be destroyed. Moreover, by the employment of steam of the above character there is no danger of injuring carpets and fabrics, as would be occasioned by the use of steam saturated by water.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a vertical sectional view through the exterminator. Fig. 2 is a view in elevation of the chimney. Fig. 3 is a cross-sectional view through said chimney.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

In the embodiment illustrated a base 4 is employed, which is preferably a rectangular board. On one end of this base is mounted a fluid-reservoir 5, that is air-tight, said reservoir being secured to the base and carrying an upstanding handle 6. A filling-nipple 7 is located on the upper portion of the reservoir, and an air-pump 8, located therein, has a piston provided with an exposed handle 9. Located on the other end of the base is a heater consisting of a removable oil-reservoir 10, carrying a suitable burner 11. The oil-reservoir is surmounted by a chimney 12, forming therein a heating-chamber 13. The chimney is preferably composed of slidably-associated sections 14 and 15, the former being rigidly mounted on the base and supported by standards or brackets 16, connected to said base on opposite sides of the oil-reservoir and attached to the lower end of the chimney. The lower end of the chimney surrounds the burner 11, and the section 14 is

provided with a door 17, hinged thereto and when opened permitting access to the burner, as well as removal of said burner from the chimney.

A conduit in the form of a pipe 18 has a depending inlet 19 within the fluid-reservoir 5, extending to a point contiguous to the bottom thereof. This conduit is provided with a coil 20, arranged within the heating-chamber 13 of the chimney above the burner and extends from said chimney downwardly, as shown at 21, to one end of the base 4. To this end is detachably secured a longitudinally-projecting nozzle 22. A valve 23 is located in the pipe 18 between the fluid-reservoir and the coil.

In using this device the fluid-reservoir 5 is partially filled with water or other suitable fluid and air is then pumped into the reservoir, so that said fluid is placed under pressure, the valve 23 being closed. The heater being lighted, it will be evident that the coil 20 will be heated, and upon opening the valve 23 water will be forced through the pipe 18 and into the coil. Here this water will be turned into steam, and the heat will be sufficient to raise the steam to a high temperature, so that when it escapes from the nozzle 22 in a fine jet it will be practically dry. The amount of steam generated and the dryness thereof can be varied by means of the valve 23. The exterminator is then held in one hand and the nozzle directed toward the crevices of the lodging-places of the insects to be exterminated, the fine jet penetrating the same and destroying all vermin and eggs.

It will be apparent that this structure is very simple and is convenient to handle, and where the crevices are low, as in the floor or under the base-board, the nozzle is in a convenient position for directing steam thereto without materially tilting the device. The oil reservoir and burner may be readily removed from the heater by opening the door 17, and the draft to the flame is regulated by raising or lowering the section 15 of the chimney, the same being held in different positions by its frictional engagement with the section 14.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be under-

stood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. An exterminator of the class described,
10 comprising a base-board, a liquid-reservoir, heater, and air-pump carried upon and movable with the base-board, said pump having communication with the reservoir, a liquid-conducting pipe extending from the lower
15 portion of the reservoir and having a steam-generator in the heater, and a nozzle located at one end of the base-board and projecting longitudinally therefrom, said nozzle being connected to the steam-generator.
- 20 2. In an exterminator of the class described, the combination with a base, of a fluid-reservoir, an oil-reservoir mounted on the base, a burner carried by the oil-reservoir, a chimney located over the reservoir
25 and surrounding the burner, means for supporting the chimney from the base, a door forming a part of the chimney and when opened permitting the removal of the burner, and a pipe connected to the fluid-reservoir
30 and passing through the chimney over the burner.

3. In an exterminator of the class described, the combination with a base, of a liquid-reservoir secured to the base, an air-pump arranged in the reservoir, a heater
35 mounted on the base and comprising an oil-reservoir, a burner, a chimney located thereover, a pipe leading from the lower portion of the liquid-reservoir and having a steam-generating coil located within the chimney, said
40 pipe having a discharge-nozzle extending from one end of the base, and a valve located in the pipe between the reservoir and the coil.

4. In an exterminator of the class described, the combination with a base-board,
45 of a liquid-reservoir, an air-pump carried by and located in the reservoir, a heater having a chimney located thereon, a pipe extending from the lower portion of the reservoir and having a steam-generating coil located in the
50 chimney, and a nozzle connected to the generating-coil and located exteriorly of the chimney, all the said parts being carried upon and movable with the base-board.

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

JAMES D. HARRIS.

Witnesses:

CHARLES V. PINION,
JOHN Q. TAYLOR.