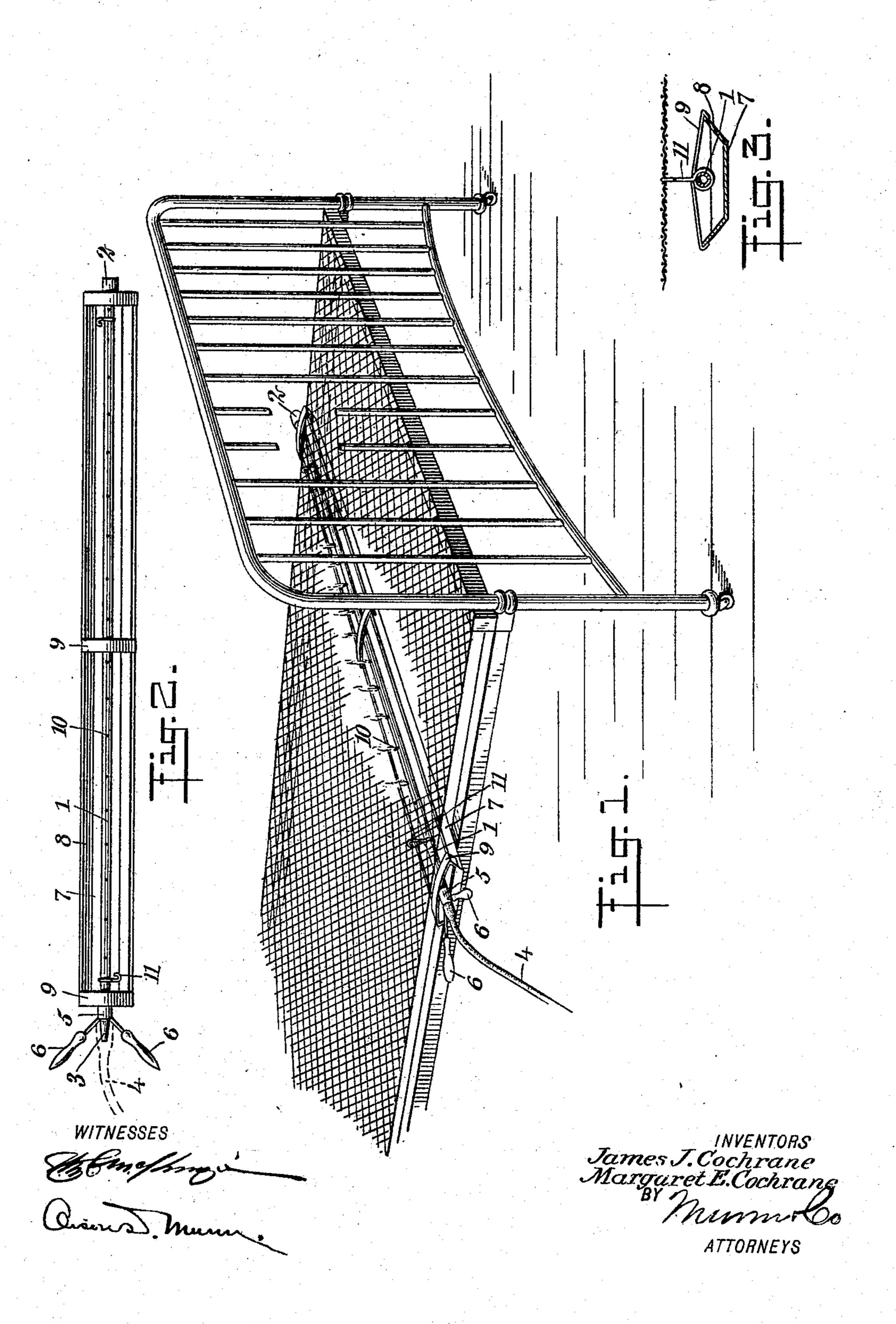
## J. J. & M. E. COCHRANE. INSECT EXTERMINATOR. APPLICATION FILED NOV. 11, 1908.

919,827.

Patented Apr. 27, 1909.



## UNITED STATES PATENT OFFICE.

JAMES J. COCHRANE AND MARGARET E. COCHRANE, OF JERSEY CITY, NEW JERSEY.

## INSECT-EXTERMINATOR.

No. 919,827.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed November 11, 1908. Serial No. 462,052.

To all whom it may concern:

Be it known that we, James J. Cochrane and Margaret E. Cochrane, both citizens of the United States, and residents of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Insect-Exterminator, of which the following is a full, clear, and exact description.

10 This invention relates to insect exterminators, and more particularly such as are adapted to be used for destroying bed bugs or the like, and each of which in general consists of a burner adapted to have one end connected to any suitable gas supply, and a pan movably carried by the burner and serving to receive the dead insects.

The object of this invention is to provide a device of the class described, simple and efficient in construction and inexpensive to manufacture, which can be easily connected to a gas jet by means of flexible piping, and which, when in operation, will reach all the recesses and other places of concealment of the insects, to drive the latter out and destroy them.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view showing an embodiment of our invention, applied to an iron bedstead; Fig. 2 is a plan view of our invention; and Fig. 3 is a cross section of our invention, showing the same temporarily secured to the springs of a bed.

Before proceeding to a more detailed description of our invention, it should be understood that great difficulty has been found heretofore in destroying insects such as bed bugs or the like by means of chemicals, inasmuch as these cannot be successfully injected into all of the recesses and other 45 places of concealment of the insects. We have, therefore, provided a device as before described, consisting in general of a burner and a refuse pan movably carried by the burner. The latter can be connected by 50 means of flexible piping to any suitable gas supply, for instance, the ordinary gas jet or the like. Further, it may be advisable to use instead of gas, such means as steam or hot air, when the burner serves the purposes 55 of a nozzle or sprayer. It should further be understood that we do not limit ourselves to

the specific form shown in the drawings, as others equally advantageous may be used without departing from the spirit or the scope of the invention.

In the specific form shown in the drawings, we provide a burner 1 formed from a hollow, elongated member such as piping or the like, and which has one end provided with a cap 2. The other end 3 is suitably 65 formed so that it may be connected by means of flexible piping 4 to any suitable source of supply, such as an ordinary gas jet or the like. Rigid with the end 3 of the burner is a collar 5 to which are attached 70 two handles 6, which serve to allow the operator to manage the device. Movably carried by the burner is a refuse pan 7, the latter having its sides 8 upwardly and outwardly disposed. Supports 9 extend from 75 one side of the pan to the other, over the burner, so that the pan will be held in place.

The burner is provided with a plurality of openings 10 through which the gas may escape for the purpose of combustion. Slid-80 ably arranged on the burner are hooks 11, which can be used to support the device from the springs of a bed, as shown most clearly in Fig. 1 of the drawings, or to any suitable support.

In the operation of the device, the burner is connected with a gas jet or other suitable means of supply and the escaping gas lighted at the openings 10. The device is then placed on the rails of a bed, and by means of the 90 handles 6, may be moved along under the springs. As the burner is moved along, it may be tipped so that the flames will point in any desired direction, and therefore, reach all the crevices formed by the bed construction. The device can also be removed from under the rails and held at different points of the bed where insects are thought to be.

The heat generated by the device drives the insects from their retreats and causes 100 them to fall into the refuse pan 7. If desired, the burner can be completely turned over so that the flames will point into the pan and should there be any insects there, they will be burned to ashes, the burner being completely rotatable with respect to the pan, owing to its movable engagement with the supports.

Having thus described our invention, we claim as new and desire to secure by Letters 110 Patent:

1. A device of the class described, compris-

ing a portable burner, a flexible conduit for connecting said burner with a stationary gas supply independent of the device, and a refuse pan movably supported upon said 5 burner whereby said burner can be held in a plurality of positions without displacing said pan.

2. A device of the class described, comprising a burner adapted to be connected to a 10 gas supply, a refuse pan having supports movably engaging said burner whereby said pan is movably secured to said burner so that said burner can be directed in a plurality of positions without displacing said pan, said 15 pan tending gravitationally to maintain a

normal position. 3. A device of the class described, comprising an elongated burner adapted to be flexibly connected to a stationary gas supply, an 20 elongated refuse pan under said burner and

movably connected therewith, and a handle for directing said burner in a plurality of

directions.

4. A device of the class described, compris-25 ing a burner adapted to be connected to a gas supply, a refuse pan movably carried on said burner, and means for temporarily securing the device to a part of a bed construction.

5. A device of the class described, compris-30 ing a burner adapted to be connected to a gas supply, a refuse pan movably carried on said burner, hooks for temporarily securing the device to a part of the bed construction, and

means rigid with said burner whereby the device can be operatively positioned by the 35 user.

6. A device of the class described, comprising a burner adapted to be connected to a gas supply, a refuse pan movably carried by said burner and tending gravitationally to main- 40 tain a normal position under said burner, hooks for temporarily securing the device to a bed, and a handle rigid with said burner outside of said pan, whereby said device can be operatively positioned by the user, and 45 whereby the burner can be turned in a plu-

rality of directions.

7. A device of the class described, comprising an elongated burner having handles at one end, whereby said burner can be directed, 50 said burner being adapted to be flexibly connected with a stationary gas supply, an elongated pan under said burner and having cross bars forming supports adapted to extend over said burner to hold said pan movably 55 under said burner, and hooks mounted upon said burner and serving for removably attaching the device to a part of a bed.

In testimony whereof we have signed our names to this specification in the presence of 60

two subscribing witnesses.

JAMES J. COCHRANE. MARGARET E. COCHRANE.

Witnesses:

•

HENRY EIGENRAUD, ANTHONY MICHEL.