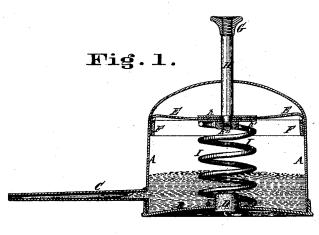
Tose & Girldsmith, Insect Jeshnyer,

NO. 109762.

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Inventors.
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# United States Patent Office.

## SALOMON ROSE AND NATHAN GOLDSMITH, OF CINCINNATI, OHIO.

Letters Patent No. 109,762, dated November 29, 1870.

#### IMPROVEMENT IN INSECT-POWDER EJECTORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, SALOMON ROSE and NATHAN GOLDSMITH, both of Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Apparatus for forcing Powder for Killing Vermin; and we do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable one skilled in the art to which our invention appertains to make and use it, reference being had to the accompanying drawing making part of this specification.

### Nature and Objects of Invention.

Our invention consists in certain improvements in the construction of an apparatus for ejecting and directing vermin-exterminating powder, for which Letters Patent were issued to Moritz Koppe, September 7, 1867, and these improvements lie in the provision of a detachable bottom for the powder-can, and the arrangement of the elastic diaphragm, which is retained in place by a clamping-ring, so that the several parts of the device may be easily separated for cleaning them, or for repairs.

## Description of the Accompanying Drawing.

Figure 1 is a vertical central section of a powderejector, embodying our invention.

Figure 2 is a perspective view of the same.

#### General Description.

A is the body of the machine, or exterior case, and B, a detachable bottom.

The case is of tapering form on the sides, and hemispherical on top. It can be "struck up" by dies, or spun," and any preferred material can be used.

The lower part of the case is serew-threaded outside, and connects with the female screw provided in bottom B.

A pipe, C, is soldered, or otherwise secured to the case, for giving direction to the powder blown out.

A stopper, D, is fitted to the hole b, through which

the case is supplied with powder.

A diaphragm, of leather, canvas, or other flexible material, E, is secured to the case A by means of the solid ring F, which, owing to the tapering form of the case A, firmly secures the diaphragm by crowding the edges of the same tightly between the case and ring

F, when the latter is forced into place.

The diaphragm is designed to have a reciprocating motion, for the purpose of compressing the air in the case A sufficiently to force out the powder. This motion is accomplished by the thumb-knob G and stem H in one direction, and by the coiled spring I in the other.

The stem H passes through an aperture in the upper part of the case A, and connects to the diaphragm by means of plates, h h', and nut h''.

The spring I is soldered, or otherwise fastened to the plate h'.

#### Operation.

The powder is placed in the case A through the opening b, and the stopper D fitted in, to close the

A slight pressure of the hand upon the knob G against the action of the spring I, serves to so compress the air contained in the case A as to expel a portion of the powder from the case A through pipe C, the latter serving to direct the powder into cracks, joints, and crevices, with considerable force. Upon the withdrawal of the pressure from the knob G, the spring retracts and elevates the diaphragm E, the chamber being supplied with air through the pipe C at the same time. If the apparatus should at any time need repair, the whole can be easily separated by the unscrewing of bottom B and knob G.

## Claim.

The improvement in insect-powder ejectors, herein described, consisting of a detachable bottom, B, for the case A. and the arrangement of the elastic diaphragm E, so as to be retained in place by a clamping-ring, F, whereby the parts constituting the device can be easily separated for repairs.

In testimony of which invention we hereunto set our hands.

SALOMON ROSE. NATHAN GOLDSMITH.

Witnesses:

FRANK MILLWARD. J. L. WARTMANN.