

W. H. BALL.

Insect-Powder Guns.

No. 141,481.

Patented August 5, 1873.

Fig. 1.

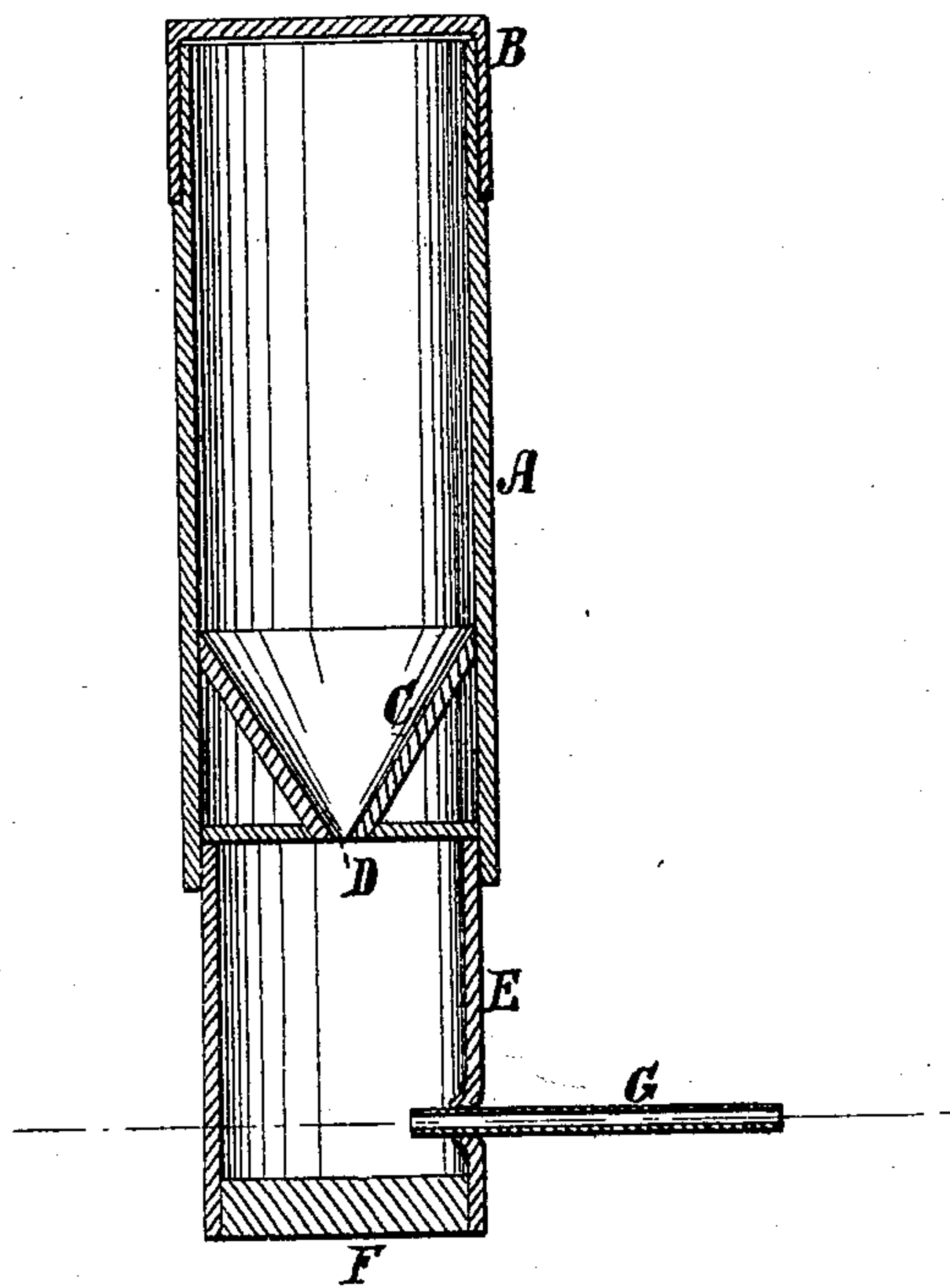
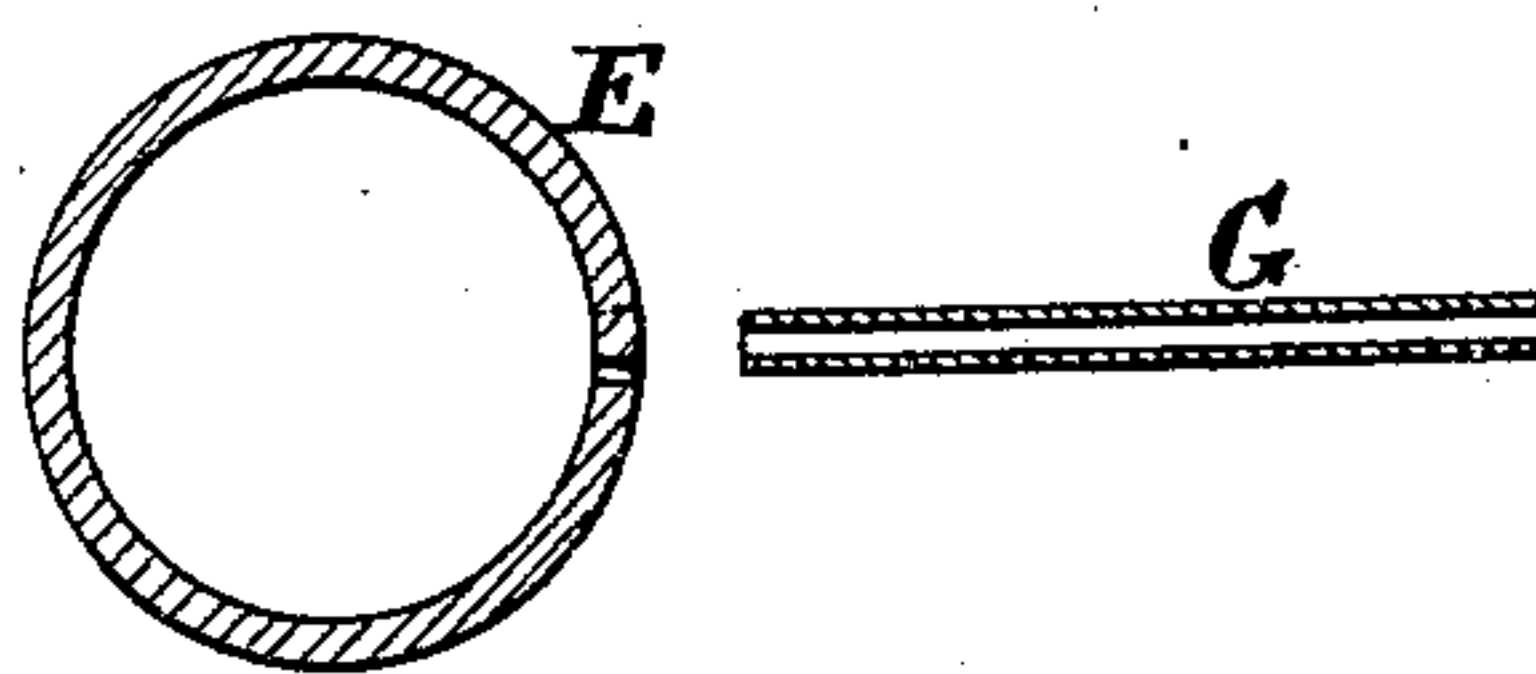


Fig. 2.



Witnesses:

A. Bunnemanndorf.
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Inventor:

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Per

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UNITED STATES PATENT OFFICE.

WILLIAM HENRY BALL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN INSECT-POWDER GUNS.

Specification forming part of Letters Patent No. **141,481**, dated August 5, 1873; application filed April 19, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. BALL, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Combined Insect-Powder Package and Gun, of which the following is a specification:

The object of my invention is to provide a commercial package for insect-powder, which may also be used as a gun or ejector for discharging the powder into crevices, &c., and at the same time to so construct it that the cost will not be much more than common packages. The invention consists of a cylindrical box, of paper, wood, or other light and inexpensive material, and a short piece of flexible tube joined together at one end, the paper or wood box having a cap at the other end, and, by preference, a hopper-shaped bottom at the end connected to the flexible tube, with a small hole for the powder to pass from it into the said flexible tube, and the latter having a small nozzle through which to eject the powder by compressing the tube, the nozzle being detachably connected so as to pack the packages economically. The hopper-bottom is employed to retain the mass of the material in the paper or wood box in which it is packed and deliver it into the flexible ejecting portion in small quantities as the box is shaken, and thus prevent the filling of the injector compactly, which would interfere with the ejection of the powder by preventing the admission of air for ejecting it.

Figure 1 is a sectional elevation of my improved package and gun for insect-powder. Fig. 2 is a horizontal section, the ejecting-tube being detached.

Similar letters of reference indicate corresponding parts.

A represents the box for containing the powder. It may be of paper, wood, or other cheap and light material. B is a suitable cover for one end. C is the hopper-bottom in the other end, with a small passage, D, through the bottom of it. E is the flexible tube attached to the box A below the hopper-bottom, so that the passage D leads into it; the other end of said tube is closed by a head, F, of any kind. G is the ejecting tube or nozzle; it is

attached by being pressed in a small hole in the side of the flexible tube, which contracts around it sufficiently to hold it, but not so as to interfere with readily pulling it out or putting it in, so that the tube may be packed by the side of the box and wrapped up with it in the paper until required for use, and may then be put in by the purchaser. Thus I make a box for holding the powder and a gun for ejecting it in one article, which may be made as cheap, or nearly so, as an ordinary box, and the form is adapted for packing a large number in a box or other package economically. The hole D is so small that the powder will only pass into the collapsible tube by shaking the box, so that there is no danger of filling the tube so that it will not contain air to eject the powder.

The hopper may be dispensed with, for the powder can be made to pass through a small hole in the flat end of the box; but I prefer to use it because the action is better with it, particularly when the powder is nearly exhausted.

These packages will be filled by the manufacturer and employed as the trade-package, and to the consumers they will serve both for the package and the gun.

These articles will be made by turning up and boring the wood when wood is used, or constructing a cylindrical paper box in the ordinary way, and fitting a short section of rubber tube on one end, which is constructed a little smaller than the other portion to enter said tube, as shown.

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

A combined package and gun for insect-powder, composed of a hollow cylinder, A, of paper, wood, or other material, and a flexible tube, E, the box A having a hopper or other perforated bottom, C, and the flexible tube E having an ejecting-nozzle, substantially as specified.

WILLIAM HENRY BALL.

Witnesses:

C. SEDGWICK,
ALEX. F. ROBERTS.