## C. Chinnock,

Insect Destroyer.

16.93597.

Patented Aug. 10.1869.

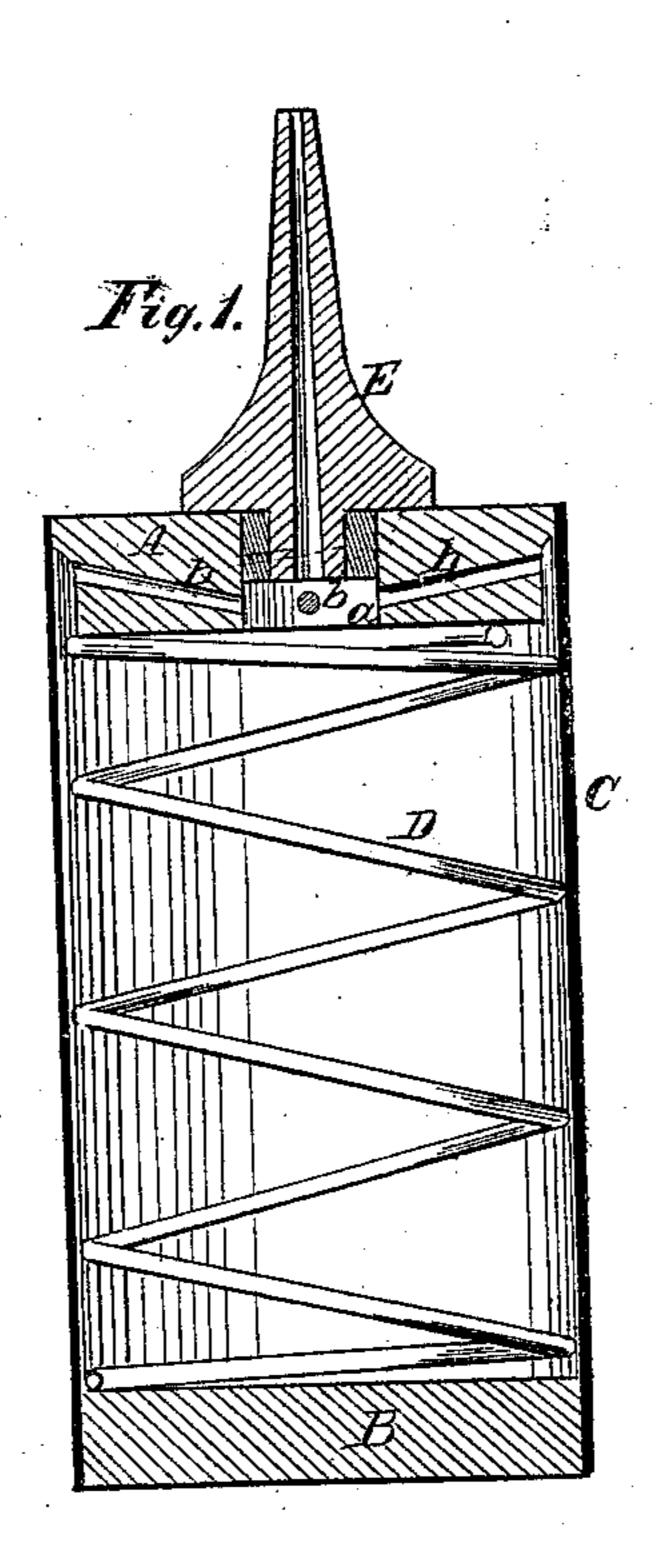
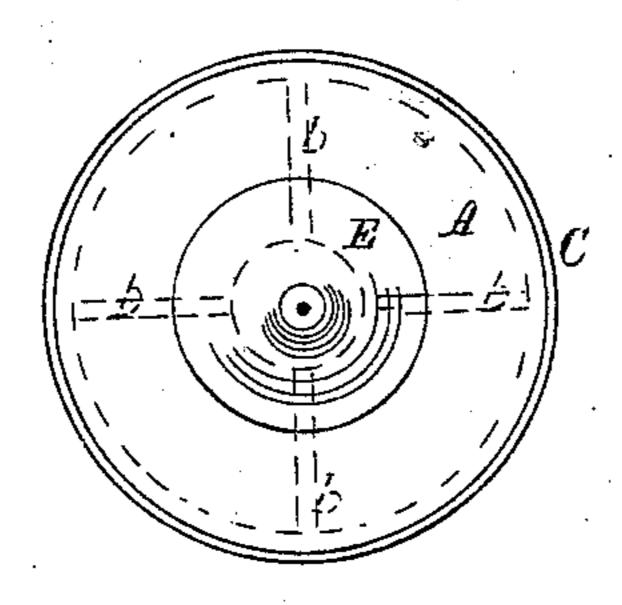


Fig. 2.



Witnesses.

MED: Haynes

Mannonto

## Anited States Patent Office.

## CHARLES CHINNOCK, OF BROOKLYN, NEW YORK.

Letters Patent No. 93,597, dated August 10, 1869.

## IMPROVED INJECTOR FOR INSECT-POWDERS.

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

To all whom it may concern:

Be it known that I, Charles Chinnock, of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful Improvement in Powder-Guns, applicable as Injectors of Insect-Powder, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a longitudinal section of a powder-gun, constructed in accordance with my improvement; and

Figure 2, a front-end view of the same.

Similar letters of reference indicate corresponding parts.

My improvement relates to devices for injecting into the crevices and places which harbor obnoxious insects, or otherwise applying or scattering powder, for the extermination of such vermin, for which purpose differently-constructed injectors have been used; and

My invention consists in a device, of bellows-like form, made up of opposite stiff end pieces or disks, united, by a flexible jacket, with a spiral spring, arranged between the disks in such manner as not only to keep them apart, and the jacket distended, but so that it serves to support the flexible jacket on the inside, which prevents wabbling in working the gun, that is provided with a suitable discharge-tube or nozzle, arranged to project from one of its disks, and such disk provided with air-vents, to prevent choking of the powder about the mouth or throat of the nozzle.

Referring to the accompanying drawing—
A and B represent stiff disks; made of wood, or

other suitable material; and

C, a close, flexible jacket, arranged to connect said disks.

D is a spiral spring, disposed within the case thus formed, and so applied, and of such dimensions, as that it not only serves to secure a broad base at its ends, in its bearing against the disks which it operates to keep separated, to secure distension of the case, but also serves to support or form a base to the interior of the flexible jacket.

This arrangement or application of the spring prevents wabbling in working the gun, as hereinafter described.

The front disk A has a hole, a, made through it, within which is fitted, so as to be capable of removal, a powder-discharging tube or nozzle, E; and said disk is further provided or constructed with any suitable number of radial passages, extending from its periphery to its orifice, a, in proximity to the mouth or throat of the discharging-tube, and, preferably, set slightly inclining, as shown in fig. 1. These passages establish air-vents, to prevent choking or jamming of the powder about the inner end of the tube, when working the gun.

To use the device, it is only necessary to remove the nozzle E, and half or partially fill the case with the insect-destroying powder, then, to replace said nozzle, and, applying it to the crevice or place it is desired to scatter the powder, press the ends of the gun quickly together with the thumb and finger, shaking the gun occasionally, if necessary, but this necessity, so far as jamming of the powder is concerned, is greatly or wholly obviated by the air-vents, b, one of which, in a horizontal use of the gun, may always be disposed to be uppermost, so that powder will not choke it at its outer end, such vents serving, as the case is compressed and allowed to distend itself again, to inject puffs or currents of air, which will keep the powder loose about the mouth or throat of the nozzle. and so secure a free discharge.

A powder-gun, thus constructed, may be got up cheap, and will be found most efficient for the purpose it is designed.

Having thus described my invention,

I claim—

The disk A, constructed or provided with air-vents b, in combination with the nozzle E, back disk B, flexible jacket C, and spiral spring D, essentially as and for the purpose or purposes herein set forth.

CHARLES CHINNOCK.

Witnesses:

J. W. COOMBS, FRED. HAYNES.