A. MEYER.

Insect-Powder Injector.

No. 163,877. Patented June 1, 1875.

Fig. I.

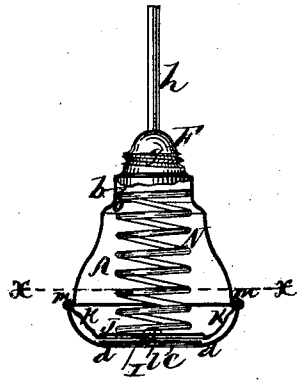
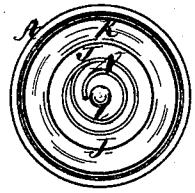


Fig. II.



Witnesses:
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Richard Gerner.

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UNITED STATES PATENT OFFICE.

ARTHUR MEYER, OF NEW YORK, N. Y.

IMPROVEMENT IN INSECT-POWDER INJECTORS.

Specification forming part of Letters Patent No. **163,877**, dated June 1, 1875; application filed March 26, 1875.

To all whom it may concern:

Be it known that I, ARTHUR MEYER, of New York city, county and State of New York, have invented certain new Improvements in Insect-Powder Injectors, of which the following is a specification:

The object of my invention is to provide for a cheap and reliable insect-powder injector, which may be placed on a table or shelf without thereby spilling its contents.

My invention consists in constructing a hollow cylindrical metallic vessel with open ends. The upper smaller end is provided with a screw-thread in order to receive a cap provided with corresponding screw-thread. This cap terminates in a nozzle. The lower and larger end is provided with an inside flange, against which, on the inner side, rest two metallic disks of somewhat less diameter than the lower part of the vessel. Between these disks is placed a diaphragm made of a flexible material, and held thereto by aid of a rivet placed in the center of the two disks. The other end of this diaphragm is fastened to the inner side about in the center of the cylindrical vessel. The disks and the diaphragm are held against the flange by aid of a spiral spring pressing against the inner disk and the inner side of the cylinder, near to the top.

The operation of my improved insect-powder injector is as follows: The powder is introduced into the cylindrical vessel through the smaller opening, over which is placed the screw-cap with its nozzle. The nozzle being directed near to the place where the insect-powder is required to be injected, the thumb of the operator's hand, holding the injector, is placed in the center of the outside disk, and by pressing inward the powder is ejected through the nozzle.

By relieving the pressure on the disk the spiral spring replaces the same in its former position against the flange.

In order to describe my invention more fully, I refer to the accompanying drawings forming a part of this specification.

Figure I is a sectional elevation of my improved insect-powder injector. Fig. II is a plan sectional view on line *x x*, Fig. I.

A is the cylindrical hollow vessel, with the smaller opening *b* and the larger opening *c*, with inside flange *d*. F is the cap, with screw-thread *g* fitting over corresponding screw-threads around the opening *b*. *h* is the nozzle attached to the cap F. I and J are the disks resting against the flange *d*. K is the diaphragm, held between the disks I and J by the rivet *l*. The other end of the diaphragm is fastened to the inner side of the cylinder at *m*. N is the spiral spring, with one end resting on the disk J, and with the other end resting against the side of the cylinder at *o*.

I am well aware that a patent was granted to Rose and Goldsmith, November 29, 1870, being No. 109,762, for an insect-power injector, illustrating the inventors' mode of obtaining results, somewhat like to what I do, while there is a material difference in the construction. I disclaim, therefore, any intention of infringing upon this patent.

Having thus described my invention, I desire to claim—

The double-bottom disks I J of the vessel A, in combination with the flexible diaphragm K and spring N, as specified.

ARTHUR MEYER.

Witnesses:
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