

(No Model.)

J. JAEGER.
INSECT POWDER EJECTOR.

No. 270,074.

Patented Jan. 2, 1883.

Fig. 1.

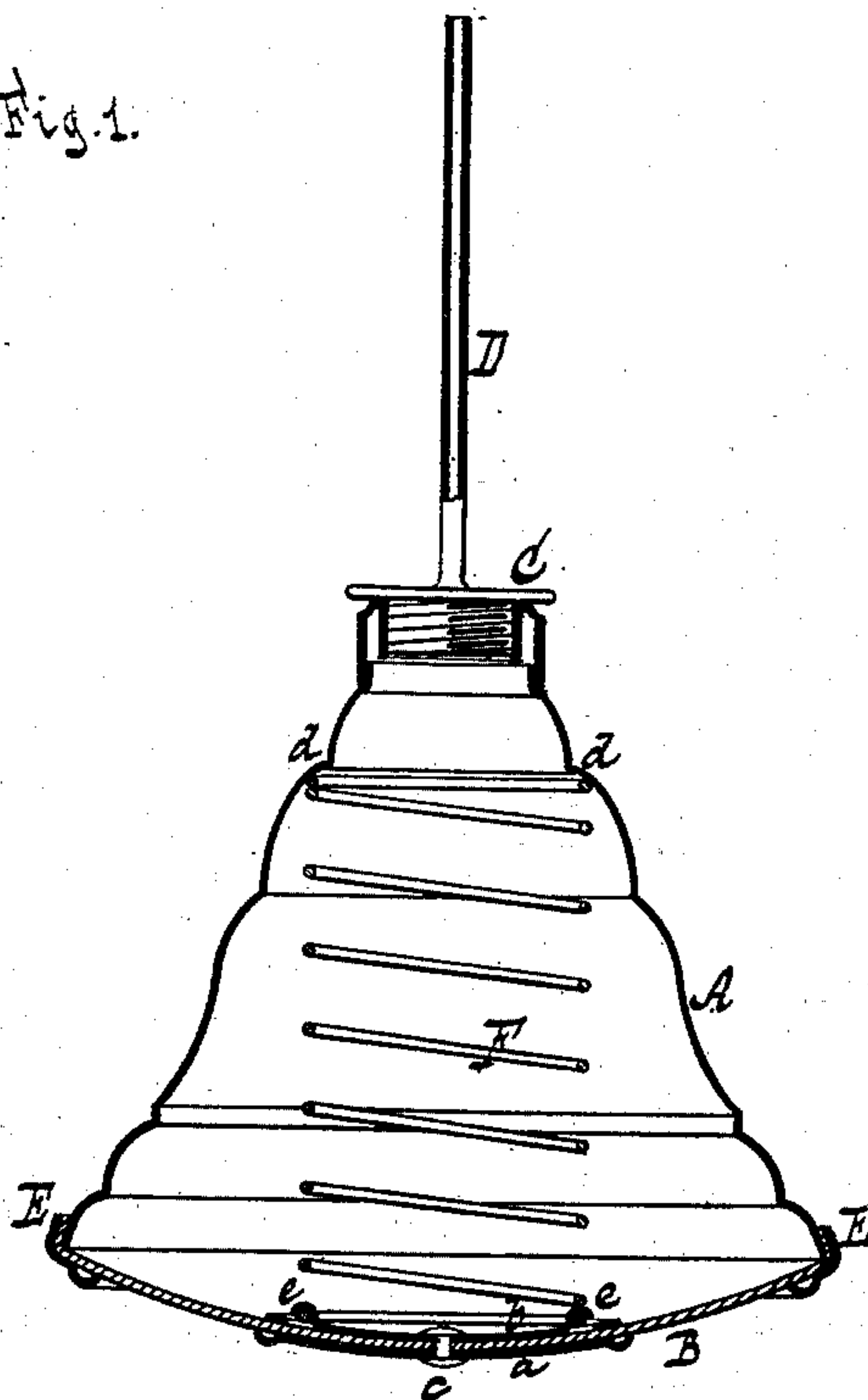
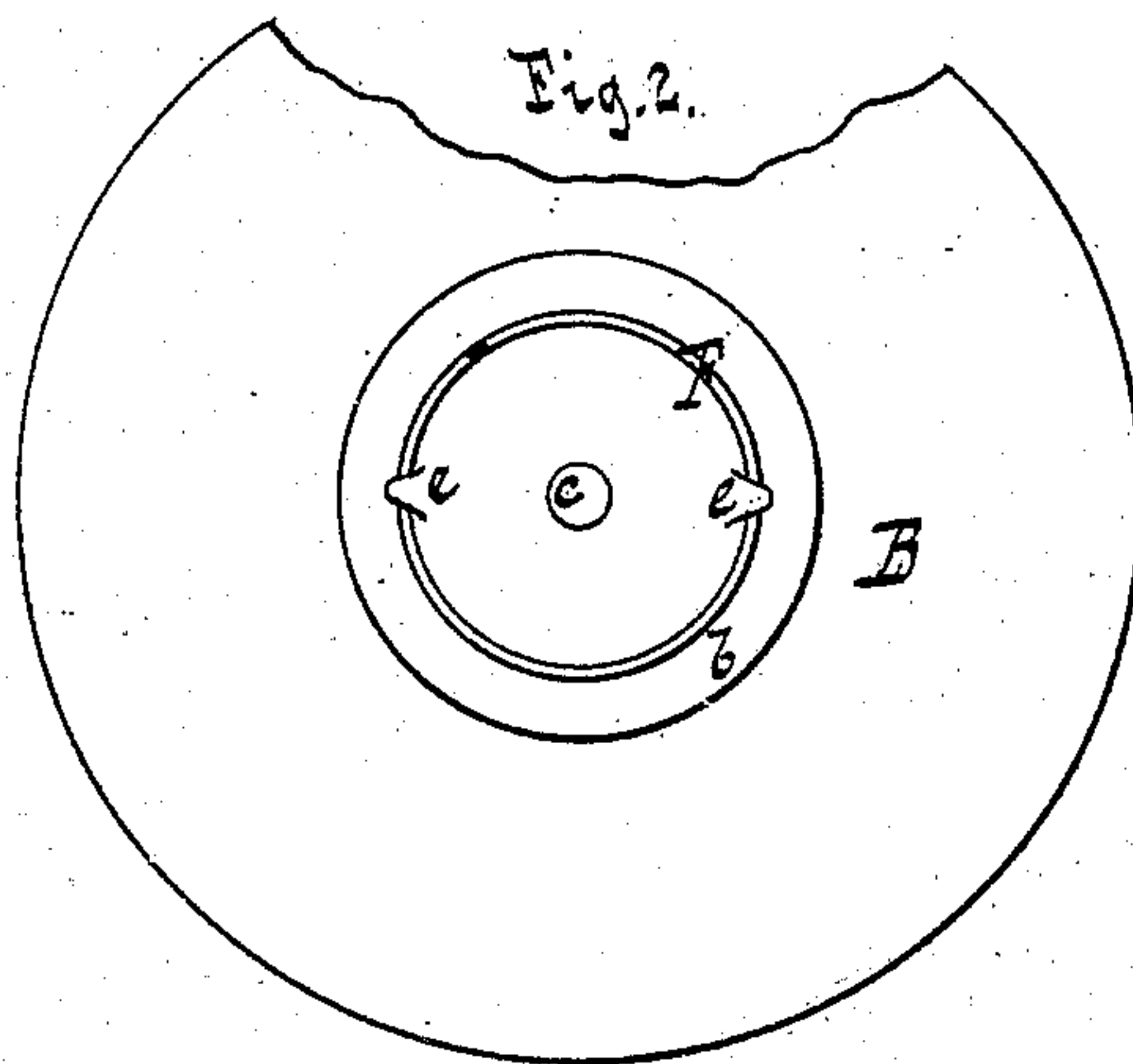


Fig. 2.



WITNESSES:

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JULIUS JAEGER, OF RUTHERFORD PARK, NEW JERSEY.

INSECT-POWDER EJECTOR.

SPECIFICATION forming part of Letters Patent No. 270,074, dated January 2, 1883.

Application filed May 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, JULIUS JAEGER, a citizen of the United States, residing at Rutherford Park, in the county of Bergen and State of New Jersey, have invented new and useful Improvements in Ejectors for Insect-Powder and other Similar Materials, of which the following is a specification.

This invention relates to improvements in that class of powder-ejectors which consist of a vessel provided with a nozzle and with a bottom composed of a flexible diaphragm, said diaphragm being acted on by a spiral spring within the vessel and provided with an inner and outer disk.

The object of my invention is to provide simple means for uniting the lower coil of the spiral spring to the flexible diaphragm; and the object of my invention I accomplish in the manner and by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section. Fig. 2 is a plan view of the elastic bottom.

Similar letters indicate corresponding parts. In the drawings, the letter A designates a tapering or funnel-shaped vessel, on the large end of which is firmly secured a bottom, B, made of india-rubber or other elastic material, while the small end of said vessel is provided with a head, C, carrying the discharge-tube D. This head screws into the mouth of the vessel A, so that the same, together with the discharge-tube D, can be taken off for the purpose of charging the vessel with insect-powder or other material of a similar nature.

The bottom B is secured to the vessel A by a sheet-metal ring, E, which, together with the edges of the bottom, is bent over the bottom edge of the vessel, as shown in Fig. 1, so that the elastic material which constitutes the bottom forms a packing, and an air-tight joint is produced.

In the center of the elastic bottom are firmly secured two metal disks, *a b*, one on the inside and the other on the outside, said disks being

connected by a rivet, *c*, so that the elastic bottom is firmly clamped between them. On the inner disk, *b*, rests a spiral spring, F, the upper end of which bears against a shoulder, *d*, formed in the interior of the vessel, so that by the action of said spring the elastic bottom is pressed outward, as shown in Fig. 1. On the disk *b* are formed two spurs, *e e*, which serve to retain the lowest coil of the spring, so that no solder is required for securing these parts together.

Instead of the spurs *e e*, loops or staples may be applied, which, however, would be equivalent to the spurs.

When the elastic bottom is pressed inward a portion of the air contained in the vessel A is expelled through the discharge-tube D, and if the vessel A has been charged with insect-powder or other similar material a portion of this material is driven out with the air, and since my vessel is funnel-shaped all the material contained therein can be ejected without difficulty.

My ejector can be easily charged, and it can be manufactured at a comparatively low price, since all the parts are so constructed that they can be united with little loss of time.

What I claim as new, and desire to secure by Letters Patent, is—

In a powder-ejector composed of a vessel, A, flexible bottom B, discharge-tube D, and spiral spring F, the combination, with the flexible bottom and the spring, of the disk *b*, secured to the inner side of the flexible bottom, and formed with projecting spurs *e e*, which clasp the lower coil of the spiral spring, as and for the purposes described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JULIUS JAEGER. [L. S.]

Witnesses:

W. HAUFF,
WILLIAM MILLER.