

(No Model.)

W. E. GIBNEY.
POWDER BLOWER.

No. 599,038.

Patented Feb. 15, 1898.

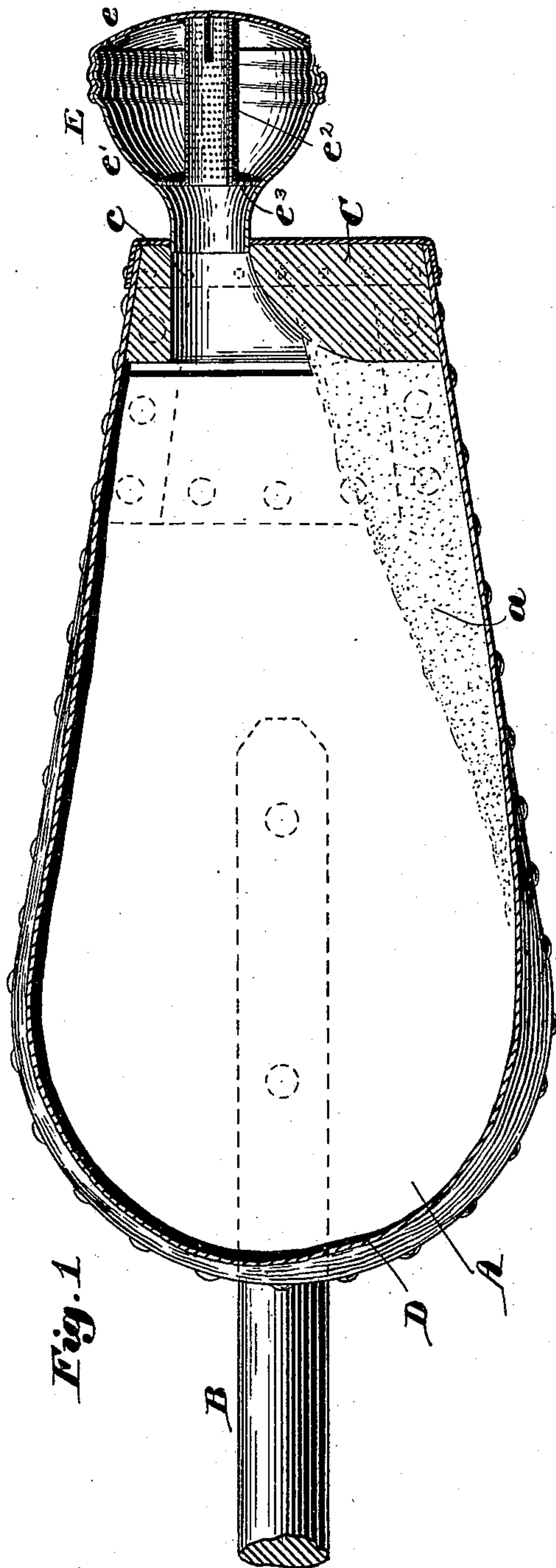


Fig. 1

Fig. 2

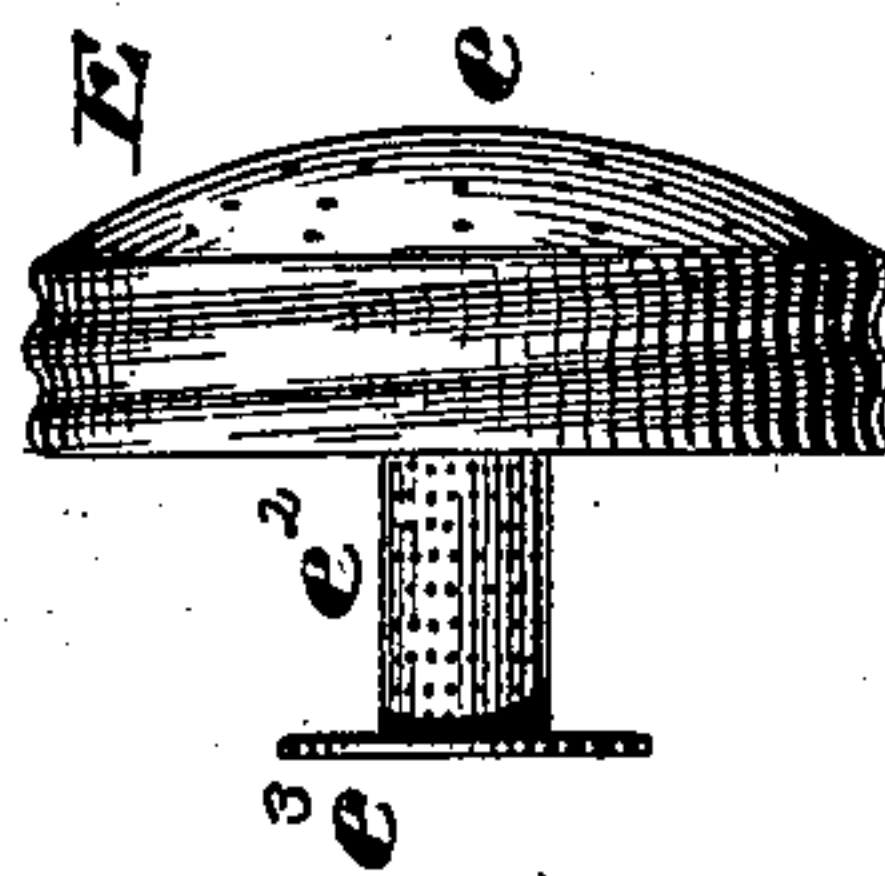
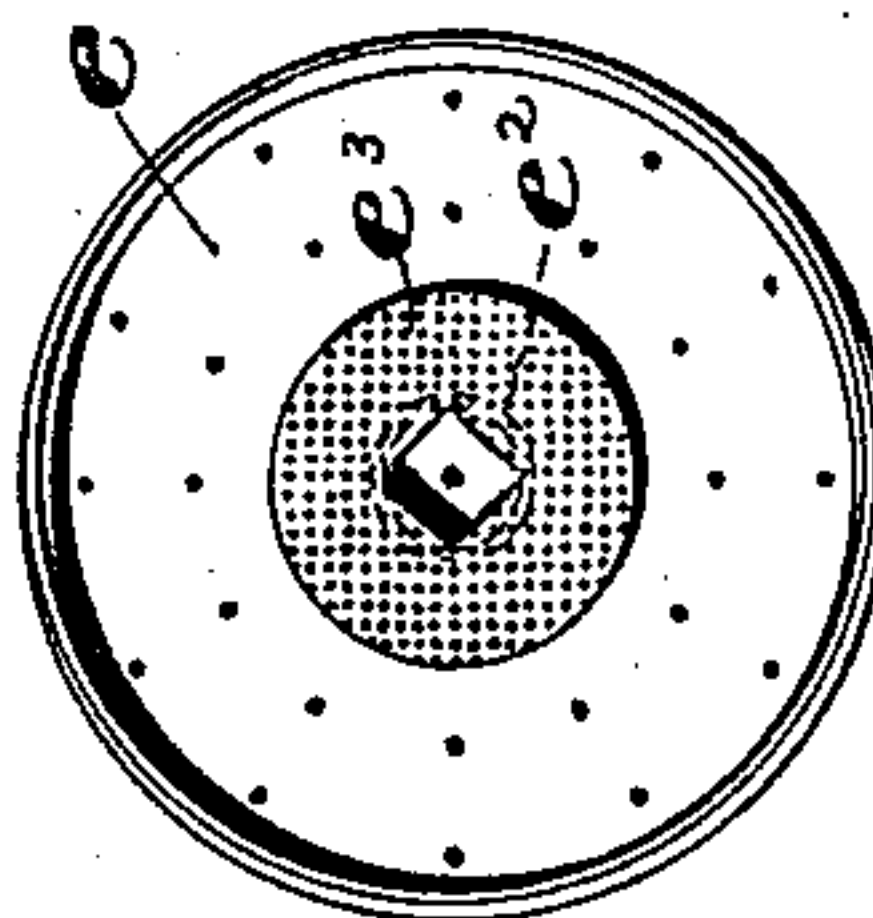


Fig. 3.



Witnesses:
Walter O. Lombard
Thomas J. Drummond

Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM E. GIBNEY, OF ANTRIM, NEW HAMPSHIRE, ASSIGNOR TO THE
GOODELL COMPANY, OF SAME PLACE.

POWDER-BLOWER.

SPECIFICATION forming part of Letters Patent No. 599,038, dated February 15, 1898.

Application filed February 25, 1897. Serial No. 624,965. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. GIBNEY, of Antrim, county of Hillsborough, State of New Hampshire, have invented an Improvement in Powder-Blowers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of an apparatus for blowing insect-powder for use in connection with plants, cattle, &c.

In this my invention the powder is blown out or discharged by a bellows; but the discharge-outlet instead of being located centrally with relation to the delivery end of the bellows is placed to one side of the center, so that the blast of air being created in the bellows may pass over rather than through the mass of powder, and the nozzle through which the powder is discharged is also of peculiar construction, it having inside its outer case or shell a foraminous tube, to which is connected, as shown, a foraminous washer, the tube and washer preventing the passage of any lumps and only letting pass the free powder in limited quantities, so as to regulate the discharge and not make it too voluminous.

Figure 1 is a much-enlarged section taken longitudinally through a bellows, the handle on the half of the bellows shown being mostly broken off. Fig. 2 shows part of the nozzle in elevation, and Fig. 3 shows the left-hand end of the part of the nozzle shown in Fig. 2.

The bellows in practice is composed of two like boards A, provided each with a suitable handle B, the two halves suitably hinged to an end block C, being connected by leather or other flexible material, as D.

The bellows may be of any usual construction or material; but in my invention the end piece C, instead of being provided with a discharge-opening equidistant from the ends of the block, is provided, as shown, with an

opening *c*, located at one side the center of said ends, so that the blast of air generated in the bellows by opening and closing it in usual manner may find exit over the mass of insect or other powder *a*, which is applied within the bellows, the bellows always being used with the orifice *c* uppermost, as shown in the drawings. The nozzle *E* is composed of a shell made up of a concavo-convex perforated cap or end and a conical or trumpet-shaped back *e'*, the interior of the shell containing a sieve composed of a foraminous tube *e²*, provided at one end with a washer *e³*, also preferably made foraminous.

In operation the air being forced from the bellows in its passage over the top of the pile of powder takes up and carries with it a limited quantity of the powder, which is thrown against the washer and into the tube and passes through both into the shell of the nozzle and is discharged from the cap *e* finely divided and separated, any lumps taken up by the air lodging in the tube.

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

1. In a powder-blower, a discharge-orifice having a perforated shell-like nozzle, provided with a foraminous tube having at its inner end a foraminous washer, substantially as described.

2. In a powder-blower, a bellows having the discharge-orifice in its delivery end located at one side of its center, and a shell-like nozzle containing within it a foraminous tube provided at one end with a foraminous washer to operate, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM E. GIBNEY.

Witnesses:

SYLVANUS DOW,
CHAS. H. MARTIN.