

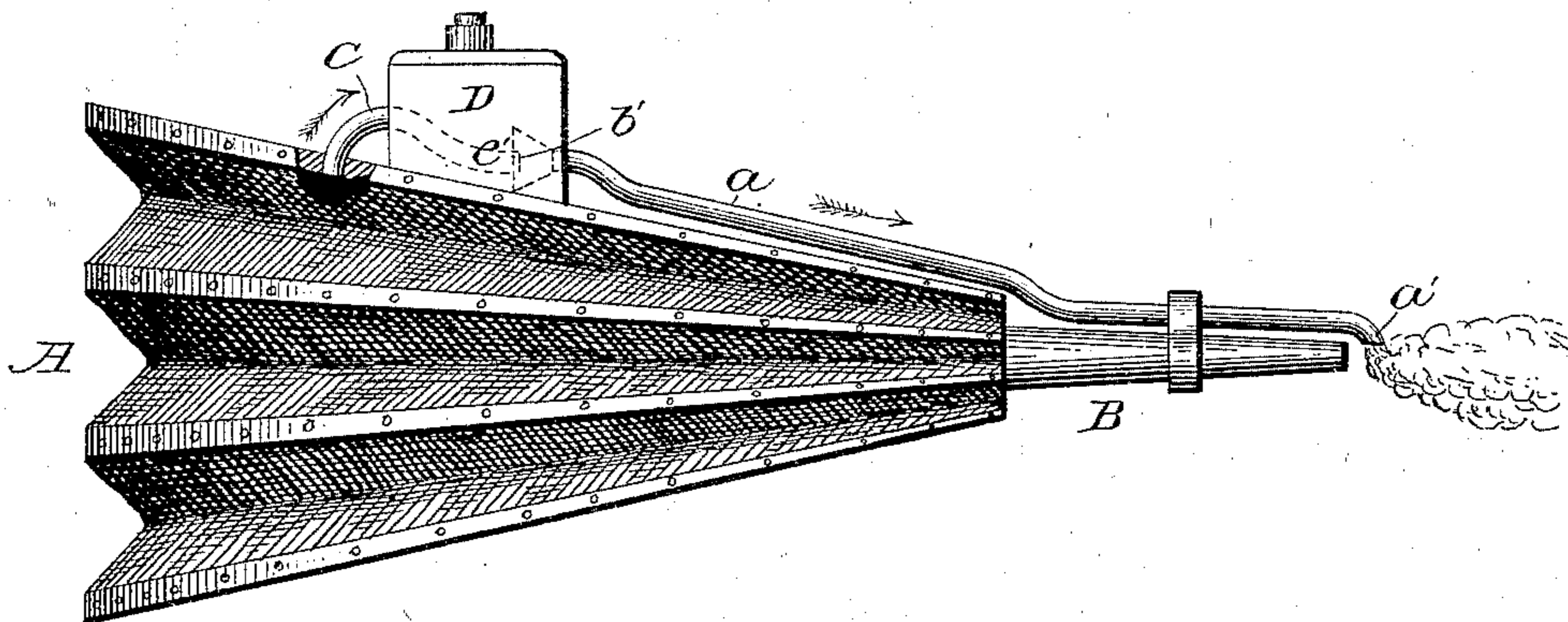
(No Model.)

T. W. HOUCHIN, C. B. RIKER & W. P. HOUCHIN.

INSECT POWDER DISTRIBUTER.

No. 335,817.

Patented Feb. 9, 1886.



Witnesses:

W. P. Houchin
C. B. Riker

Inventors

Thomas W. Houchin
Charles B. Riker
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UNITED STATES PATENT OFFICE.

THOMAS W. HOUCHIN, CHARLES B. RIKER, AND WALDO P. HOUCHIN, OF
NEW YORK, N. Y.

INSECT-POWDER DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 335,817, dated February 9, 1886.

Application filed October 3, 1885. Serial No. 178,917. (No model.)

To all whom it may concern:

Be it known that we, THOMAS W. HOUCHIN, CHARLES B. RIKER, and WALDO P. HOUCHIN, citizens of the United States, and residents of New York city, in the county and State of New York, have invented certain new and useful Improvements in Insect-Powder Distributers, of which the following is a specification.

Our invention relates to atomizers or insect-powder distributers, and has for its object a better distribution of insect-powder.

It consists of a bellows of ordinary construction, and provided with a box or receptacle placed on the top of the bellows and suitable means of forcing the powder out of the receptacle and leading it to the mouth or nozzle of the bellows, where it is met by a jet of air and thoroughly atomized and distributed, all of which will be more fully hereinafter described.

In the accompanying drawing the figure represents a vertical section of our improved atomizer.

A represents a bellows, of the usual construction, provided with a nozzle, B.

D is a box or other suitable receptacle for the powder, secured in any convenient way to the bellows.

From the top of the bellows, at about the point indicated in the drawing, is conducted a tube or small pipe, C, terminating in a small opening within the receptacle at or about the point *e'*. From the said point *e'* is conducted the pipe or tube *a*, running along the top of the bellows and the nozzle thereof, and termi-

nating at a point just in front of the mouth of the bellows, as shown at *a'*. The tube *a* is preferably funnel-shaped at the end placed in the receptacle, as shown at *b'*. The end of the tube C is preferably placed slightly within the funnel-shaped opening of the pipe *a*. This is to prevent the powder from clogging in the pipe *a*, as well as to more perfectly direct the jet of air coming from the pipe C, the advantages of which will be readily understood.

When the bellows is worked, the air passes up through the pipe C, in the direction indicated by the arrow *f*, into the receptacle, and out through the pipe *a*, as indicated by the arrow *g*, where it is led to the mouth of the bellows and distributed, as shown by the arrows *h h*, &c.

What we claim is—

The combination of the bellows having receptacle D, tube C, connecting said bellows and receptacle, and tube *a*, having a funnel shape, *b'*, all substantially as described, and for the purposes set forth.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 2d day of July, 1885.

THOS. W. HOUCHIN.
CHAS. B. RIKER.
WALDO P. HOUCHIN.

Witnesses:

WM. P. KOOKOGEX,
JOSH. C. FEGAN.