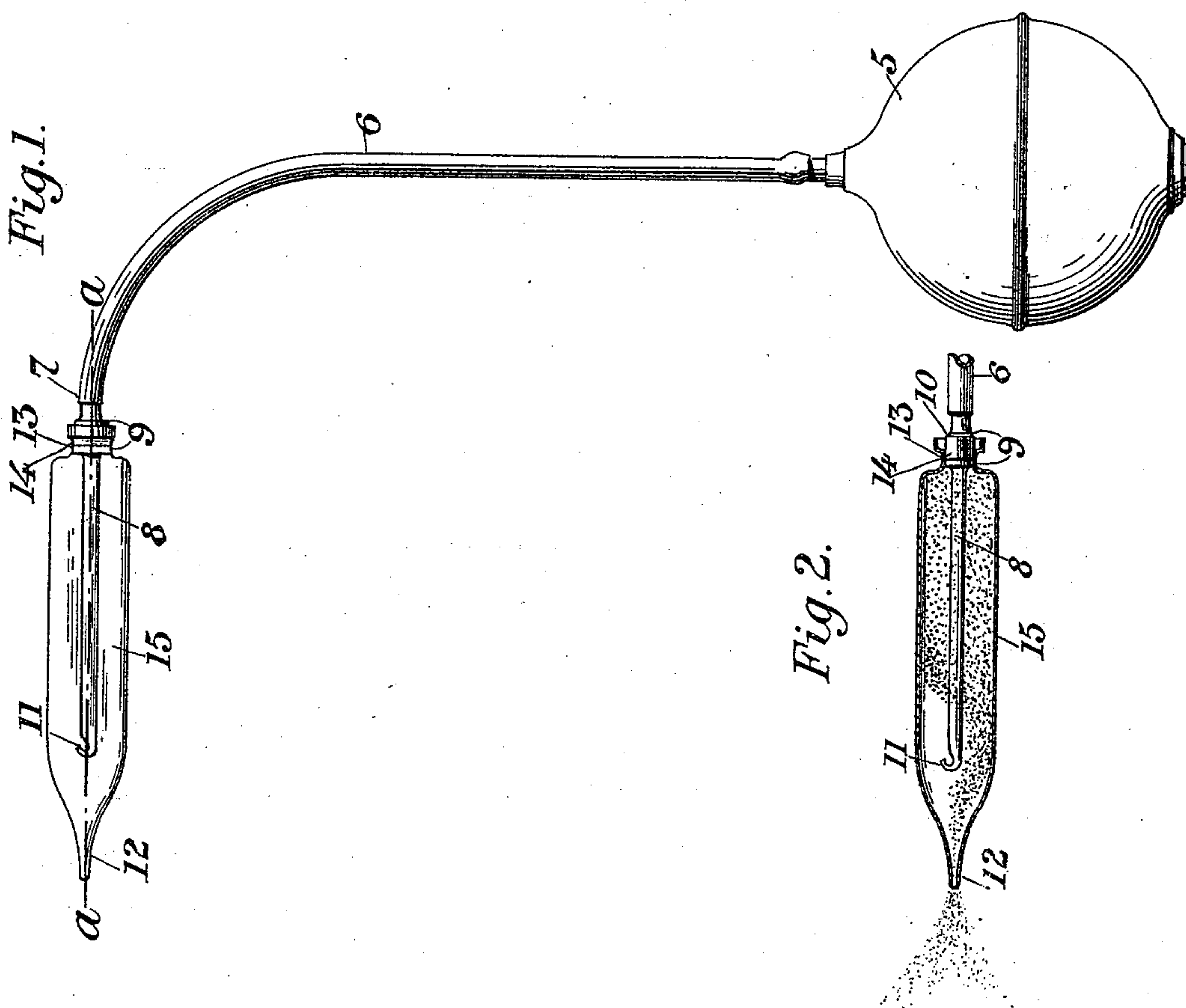


(No Model.)

A. C. BANCROFT.  
POWDER ATOMIZER.

No. 553,701.

Patented Jan. 28, 1896.



Witnesses:  
J. S. Bowen.  
Fred. J. Dole.

Inventor:  
Arthur C. Bancroft,  
by his Attorney,  
F. A. Richards.

# UNITED STATES PATENT OFFICE.

ARTHUR C. BANCROFT, OF HARTFORD, CONNECTICUT.

## POWDER-ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 553,701, dated January 28, 1896.

Application filed April 16, 1895. Serial No. 545,877. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR C. BANCROFT, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Powder-Atomizers, of which the following is a specification.

This invention relates to atomizers of that class known as "powder" atomizers; and the object of the invention is to provide an atomizer for the spraying of powder by means of an air-blast and to so agitate the powder by means of the same air-blast before the powder is blown from its receptacle that it will be blown forth in a very fine spray rather than in a compact stream.

In the drawings accompanying and forming part of this specification, Figure 1 is a side elevation of this improved powder-atomizer; and Fig. 2 is a longitudinal section of the powder-receptacle in a line *a a*, Fig. 1, a part thereof being in full lines.

Similar characters indicate corresponding parts in both the figures.

The improved powder-atomizer, in the preferred form thereof herein shown and described, consists of an elastic bulb 5 of any suitable material, preferably of rubber, as herein shown, having attached thereto, by any suitable means, a flexible tube 6, likewise of any suitable material, but preferably, and as herein shown, of soft rubber. To the free end 7 of this flexible tube is connected an agitator-tube 8 of any suitable material. (Shown herein constructed of glass.) The agitator-tube 8 is connected to the tube 6 by any suitable means, and adjacent the end of said tube is provided with two parallel projecting circular flanges 9, forming a packing-seat 10 between said flanges. The other end of said tube 8 is provided with a tapering and up-

wardly and backwardly turned nozzle 11. The agitator-tube 8 is adapted to fit within a powder-receptacle 15 of any suitable size and constructed of any suitable material; but preferably, as herein shown, constructed of glass and of tubular form.

The receptacle is provided with a tapering nozzle 12 at one end and with a neck 13 at its other end. Into this neck portion 13 the agitator-tube 8 is adapted to be inserted and is held tightly therein by means of suitable packing 14 interposed between the circular flanges 9.

In the use of this device the receptacle 15 is filled a portion of its length with any suitable powder; and when the bulb is grasped the air-blast, moving through the agitator-tube 8, is blown in a backward direction in said receptacle, thereby agitating the outer surface of the powder in the receptacle and whirling and blowing the same from said receptacle and through the nozzle thereof in a very fine spray.

In devices of this character without the agitator-tube, as herein constructed, the powder is blown forth in a compact stream rather than in a spray.

I claim as my invention—

A powder atomizer, consisting of a powder-receptacle provided with a discharge-nozzle and with a neck; an agitator-tube therein having a tapering, backwardly-turned nozzle, and having parallel flanges adapted to receive a packing between them, whereby said tube is adapted to fit tightly within said neck; and a bulb connected to said agitator-tube, substantially as described.

ARTHUR C. BANCROFT.

Witnesses:

FRED. J. DOLE,  
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