

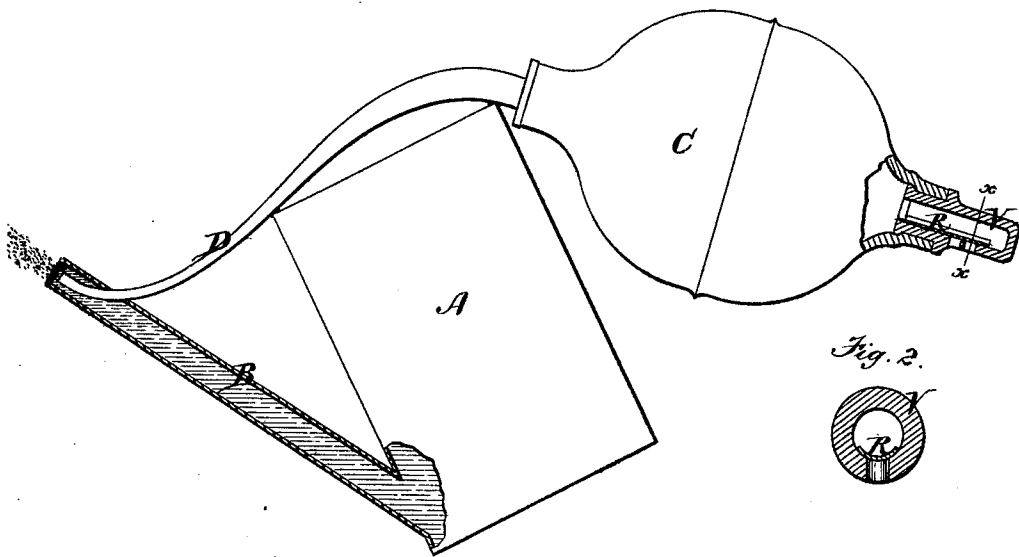
W. V. WALLACE.

ATOMIZER.

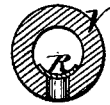
No. 185,603.

Patented Dec. 19, 1876.

*Fig. 1.*



*Fig. 2.*



*Wm V Wallace*

*Witnesses:*  
*C. F. Brown.*  
*A. E. Denson.*

*Inventor.*

# UNITED STATES PATENT OFFICE.

WILLIAM V. WALLACE, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN ATOMIZERS.

Specification forming part of Letters Patent No. **185,603**, dated December 19, 1876; application filed June 15, 1876.

### *To all whom it may concern :*

Be it known that I, WM. V. WALLACE, of the city of Boston, county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Atomizers; and I do hereby declare that the following is a full and exact description :

The object of my invention is to make an atomizer in a simple and inexpensive manner of superior capacity, and adapted to sprinkling house-plants, oxygenizing the air of a chamber, &c.

To this end I have constructed an apparatus, as shown in the annexed drawing, which I now proceed to explain and point out in my claims.

Figure 1 represents a vessel, A, with a spout, B, forming a watering-pot. Air-bulb C is connected to air-nozzle D. The latter is attached to, and proceeds across, the liquid-vessel A, and enters the spout B, terminating near its nozzle, the end of which is perforated. The air-nozzle D may pass through the vessel A, or be arranged in any form to enter the water-spout B at any point, so that its termination is as set forth.

In the ordinary atomizer the air-current is arranged to suck the liquid from the vessel, which requires accurate adjustment of the parts, and produces a small vapor. The advantages of this one are its simplicity of construction, as the arrangement of the air and liquid nozzle does not require particular adjustment, and the vessel is sustained by the air-bulb—its handle—and in use is inclined forward till the water reaches the end of the spout, and, by compression of the air-bulb, is

blown away. This method may be easily adapted to produce a large amount of vapor.

My air-valve V, as seen in Fig. 2 and *xx*, is composed of a tube closed at its outer end only, and perforated at one side with as many holes as is desired to admit the air rapidly. A half-round rubber strip, R, is secured in the bore of the tube at its open end, and projects inwardly far enough to cover the perforations in the side of the tube.

By this manner of making an air-valve I avoid the usual connection of a cap, which is screwed onto the valve, and secure the advantage of a small valve with a series of air-apertures that allow the bulb to fill much more rapidly than by the ordinary valve. This is cheap and not liable to get out of order.

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

1. In an atomizer the liquid-reservoir or watering-pot A, having the spout B, combined with the air-chamber C and air-nozzle D, the latter entering the spout B, and terminating near its nozzle, substantially as described, for the purpose specified.

2. The valve V, composed of a tube closed at the outer end only, and perforated at one side, and the rubber strip or flap R secured in the bore of the tube at its open end, and projecting inwardly far enough to cover the perforation in the side of the tube, substantially as described.

WILLIAM V. WALLACE.

Witnesses:

C. F. BROWN,  
A. E. DENISON.