No. 842,390.

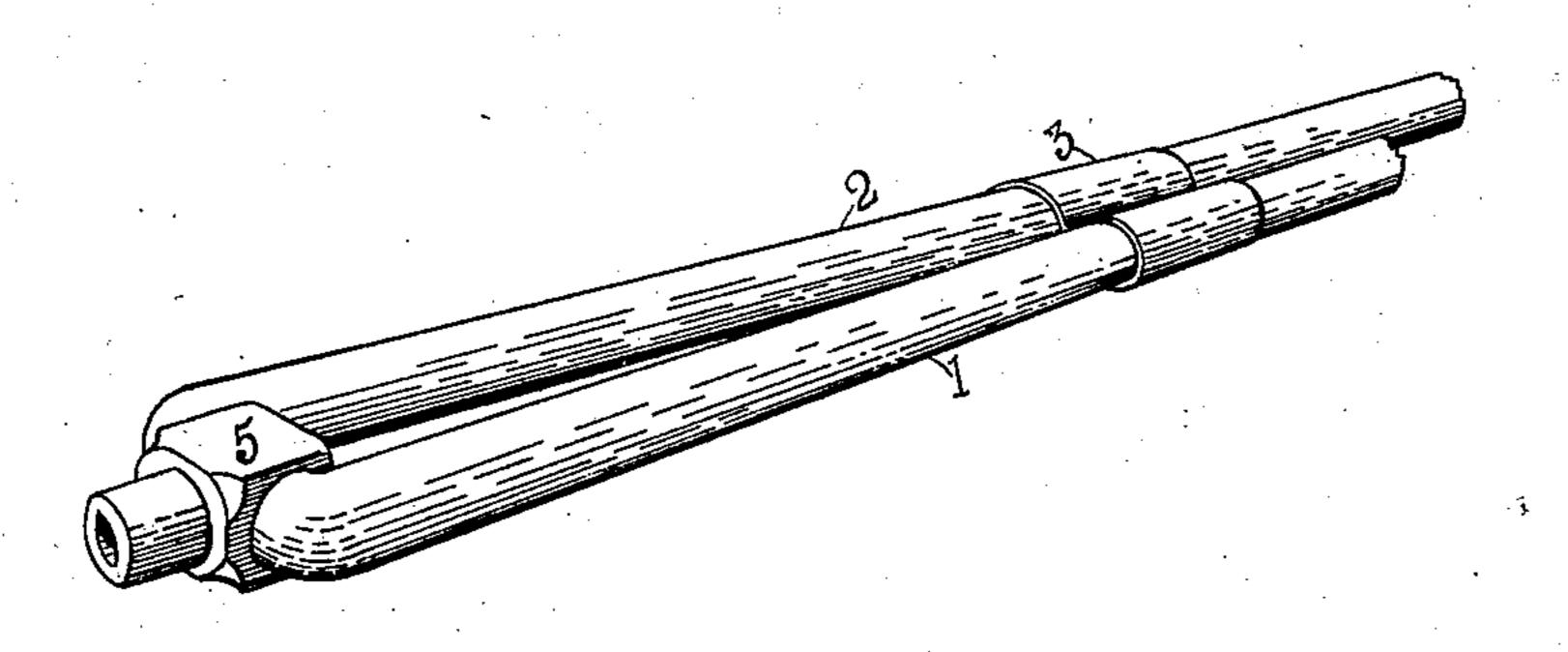
PATENTED JAN. 29, 1907.

## A. DE VILBISS.

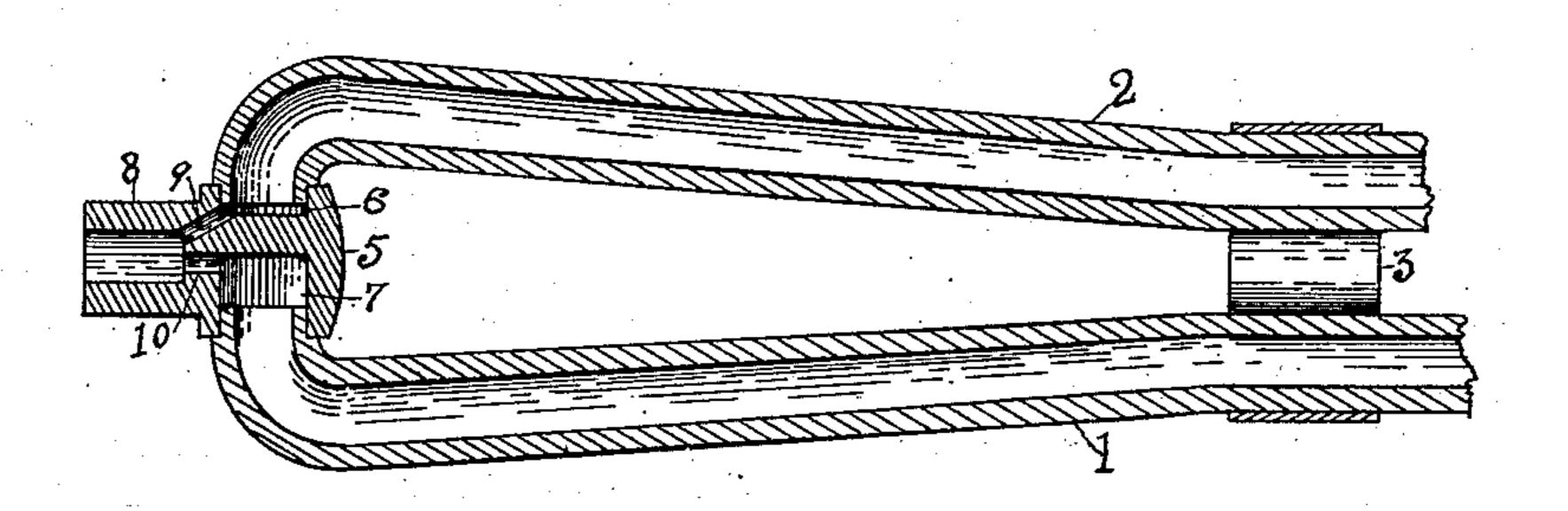
## SPRAY PRODUCING POINT FOR ATOMIZERS.

APPLICATION FILED JAN. 11, 1906.

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WITNESSES W. J. Senseman J. L. Sutchess.

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## UNITED STATES PATENT OFFICE.

ALLEN DE VILBISS, OF TOLEDO, OHIO, ASSIGNOR TO THE DE VILBISS MANU-FACTURING COMPANY, OF TOLEDO, OHIO.

## SPRAY-PRODUCING POINT FOR ATOMIZERS.

No. 842,390.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed January 11, 1906. Serial No. 295,568.

To all whom it may concern:

Be it known that I, Allen De Vilbiss, a citizen of the United States, residing at Toledo, county of Lucas, State of Ohio, have invented a new and useful Spray - Producing Point for Atomizers.

This invention relates to that type of atomizers which creates a spray by means of a vacuum.

The object of my invention is to produce a spray-producing point which is very cheaply manufactured and which will give uniform results without adjustment, as is necessary in other types of spray-producing points. I attain these objects by constructing a spray-producing point as illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my device; Fig. 2, a central longitudinal sectional eleva-

20 tion.

Like numerals of reference indicate like

parts throughout the drawings.

In the drawings, 1 and 2 are tubes which at some distance from their extremities are bound together in nearly parallel relation by metal band 3. The tube 1 is connected with an air-compressor bulb, and the tube 2 is connected with a chamber of the vessel which contains the liquid to be atomized.

30 The bulb and the vessel referred to are omitted from the drawings, as they form no part of my invention and being of the usual form will be well understood without illustration. At their outer extremities the tubes 1 and 2 are turned inwardly, so that their ends point toward each other.

5 is the spray - producing point. This point in its outline resembles a cube, having a cylindrical tube integral therewith and projecting from one of its sides. In two of its sides recesses are formed opposite to each other and having coincident axes. These

recesses 6 and 7 receive shoulders formed on the ends of the inwardly-turned portions of tubes 1 and 2 and about which the point rotates. One of the unrecessed sides of the point 5 has a projection 8, which is preferably in the form of a cylindrical tube. Opening into this tube are passages 9 and 10, leading from recesses 6 and 7, respectively.

The operation of this point is as follows: Air being forced through the tube 1 by a bulb or other means enters the tube 8 through the recess 7 and the passage 10. The air entering the tube 8 produces a vacuum which 55 draws the fluid through the tube 2, recess 6, and passage 9 into the tube 8, where it mingles with the air and is thrown out in the form of a spray.

As the tubes and the rotatable feature of 60 the point form no feature of my invention, I do not wish to be limited as to any particular type of points.

Having thus described my invention, what I claim as new is—

1. A spray-producing point formed of a single piece, provided with a liquid-conduit and an air-conduit which open into a chamber common to both of them through the rear integral wall of said chamber, the outer ends 70 of said conduits formed with restricted openings.

2. A spray-producing point formed of a single piece, provided with a liquid-conduit and an air-conduit which open into a cham- 75 ber common to both of them through the rear integral wall of said chamber, the outer ends of said conduits formed with restricted openings, the outer ends of said conduits located one immediately above the other.

ALLEN DE VILBISS.

Witnesses:

M. L. Thompson, O. E. Schupp.