

F. E. STANLEY.

ATOMIZERS.

No. 182,389.

Patented Sept. 19, 1876.

fig: 1.

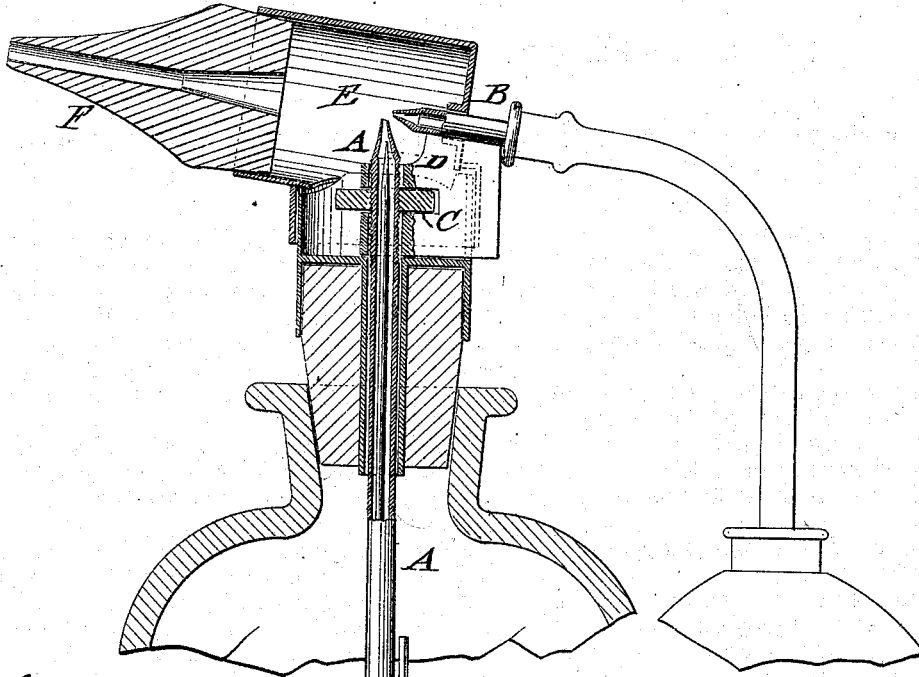


fig: 2.

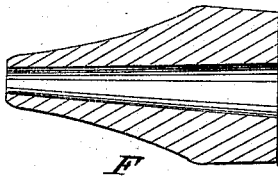
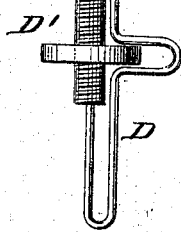
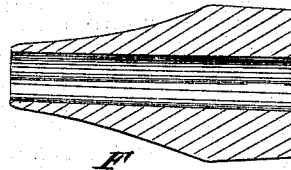


fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK E. STANLEY, OF AUBURN, MAINE.

IMPROVEMENT IN ATOMIZERS.

Specification forming part of Letters Patent No. 182,389, dated September 19, 1876; application filed June 20, 1876.

To all whom it may concern:

Be it known that I, FRANK E. STANLEY, of Auburn, in the county of Androscoggin and State of Maine, have invented a new and Improved Atomizer, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section of my improved atomizer, and Figs. 2 and 3 are central sections of nozzles of different sizes to be used with the atomizer for confining the spray.

Similar letters of reference indicate corresponding parts.

My invention relates to such improvements in atomizers that they may be employed for finishing photographs in water-colors, india-ink, and crayon, and also for all kinds of shading in which color can be used in a liquid state.

The invention consists in inserting an adjustable wire with pointed end into the liquid-tube, to regulate the amount of liquid issued. A cap or hood with detachable nozzles, having varying orifices, admits the confining of the spray to a certain surface.

In the drawing, A represents the vertical tube that extends down in the liquid, and B the inclined pointed tube connecting with the bulb of an atomizer. The tubes are applied to or connected by a suitable bracket or support, having a sleeve in which the vertical tube A slides, being adjusted at greater or less distance from the stationary tube B by a set-screw, C, that engages an outer thread of tube A. By moving the vertical tube up closer to the stationary tube the spray is made coarse, and by moving the liquid-tube down the spray is made finer.

A wire, D, is placed, centrally into the liquid-tube A, and extended, by its pointed end,

into the conically-tapering point of the tube A. The lower part of the wire is bent and connected in suitable manner to a set-screw, D', at the lower part of the liquid-tube, so that the wire can be made to open or close the issuing-orifice of the tube, and thereby the amount of liquid that flows through the same is regulated.

The spray can thus be regulated as to quality and quantity in a convenient manner, by merely adjusting the tube and wire with the set-screws.

A cap or hood, E, is placed over the atomizing-tubes, and used with nozzles F, having orifices of different sizes, varying from one-sixteenth of an inch to half an inch. The nozzles are used when the surface to be shaded is small.

By the use of the nozzles the spray is confined upon a larger or smaller surface, while for larger surface-shading the atomizer is used without the cap.

The atomizer may be applied to a variety of shading purposes, producing beautiful effects, as, for instance, by the use of lamp-black in alcohol, an imitation of the finest stipple engraving.

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

1. The hood E, adapted to connect with atomizing-tubes A B and nozzle F, substantially as and for the purpose specified.

2. The combination of the liquid-tube with a central adjustable wire extending into the point of the tube, to regulate quantity of liquid thrown out, substantially as set forth.

FRANK E. STANLEY.

Witnesses:

GEO. S. WOODMAN,
F. W. HUNTON.