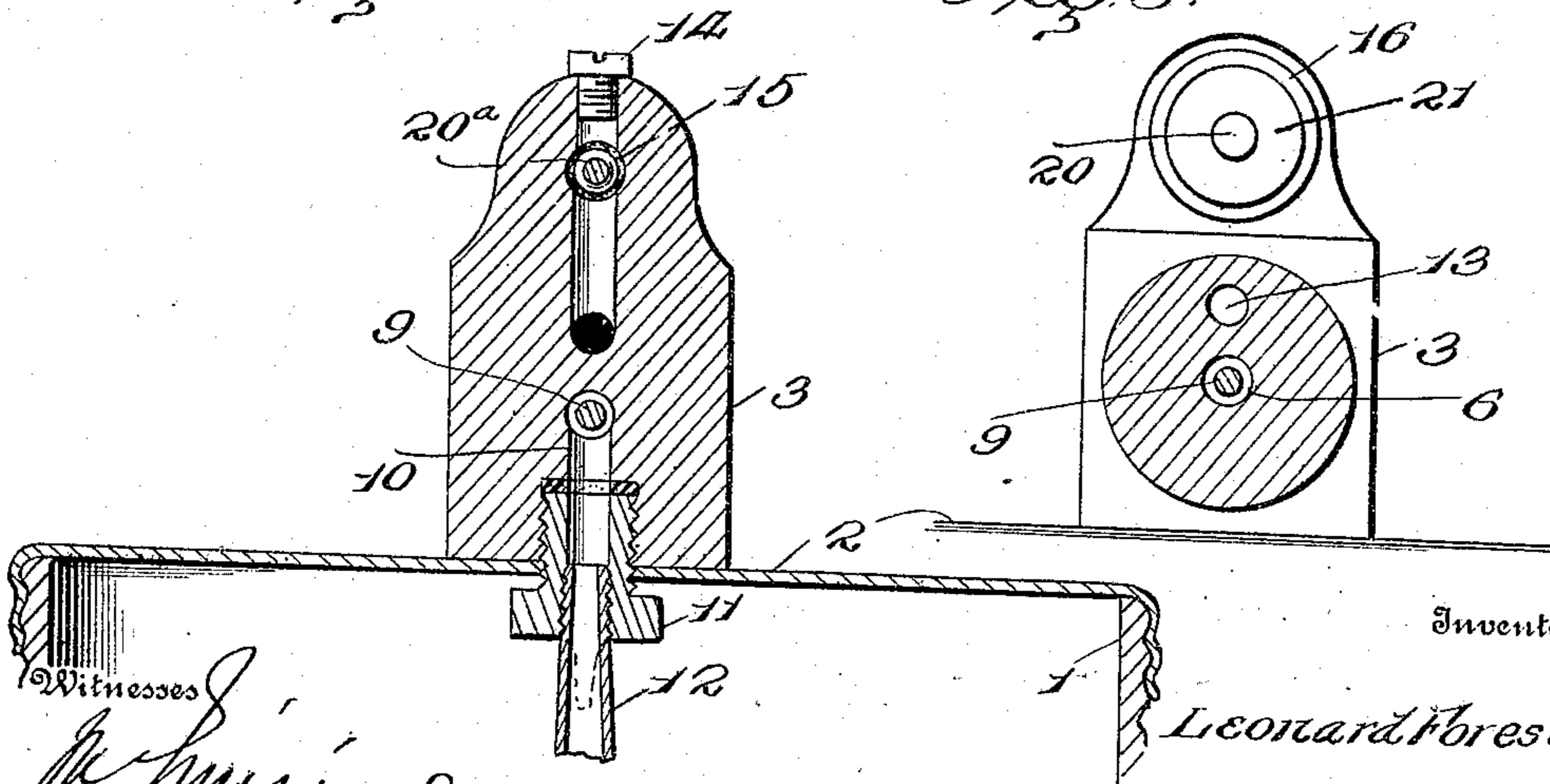


AIR BRUSH.

920,855.

Patented May 4, 1909.



Inventor

Leonard Forester

విక్ర

Ad. B. Kacy

Attorney J

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEONARD FORESTER, OF STEUBENVILLE, OHIO, ASSIGNOR OF ONE-HALF TO BERTLEY B. MILLISON, OF STEUBENVILLE, OHIO.

AIR-BRUSH.

No. 920,855.

Specification of Letters Patent.

Patented May 4, 1909.

Application filed April 17, 1908. Serial No. 427,569.

To all whom it may concern:

Be it known that I, LEONARD FORESTER, citizen of the United States, residing at Steubenville, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Air-Brushes, of which the following is a specification.

The present invention relates to improvements in brushes of that type which are operated through the medium of compressed air and serve to discharge the pigment against the surface being coated in the form of a fine spray.

The object of the invention is the provision of a brush of this character which is simple and compact in its construction and embodies novel means whereby the discharge of the pigment is placed completely under the control of the operator.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view through an air brush embodying the invention. Fig. 2 is an enlarged sectional view on the line 2—2 of Fig. 1. Fig. 3 is a similar view on the line 3—3 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the reservoir or receptacle within which the pigment or paint is placed, the said reservoir being closed by a cover 2 which in the present instance has a threaded engagement with the mouth thereof. A head 3 is secured to the cover 2 by any suitable means as the pins 4 and one end of the head projects beyond an edge of the cover and is exteriorly threaded to receive the base of an air nozzle 5, the outer portion of the air nozzle being contracted and terminating in a jet opening 5^a. Extending through the head 3 in alinement with the jet opening of the air nozzle is a passage 6 one end of which is internally threaded for engagement with the pigment nozzle 7 which is housed within the air nozzle, while the opposite end of the passage is enlarged and threaded to receive a packing gland 8. The pigment nozzle 7 is contracted toward the discharge end thereof

for coöperation with a needle valve 9 which extends through the passage 6 and is carried by a plug 9^a which is threaded within the packing gland 8 and is formed with a finger piece 9^b. It will thus be apparent that by suitably turning the finger-piece 9^b the needle valve 9 can be moved in and out and the effective size of the discharge opening through the pigment nozzle controlled as desired. Communicating with an intermediate portion of the passage 6 is a downwardly extending opening 10 having the mouth thereof enlarged and internally threaded to receive a thumb nut 11 which passes through the cover 2 and coöperates with the pins 4 to secure the head thereto. This thumb nut has an opening therethrough and carries a tube 12 communicating with the said opening and projecting downwardly within the reservoir toward the bottom thereof. In this manner communication is established between the reservoir and the pigment nozzle so that as will be hereinafter more fully described the pigment within the reservoir will be drawn upwardly through the tube 12 and discharged from the nozzle in the form of a fine spray.

Located above the passage 6 and parallel thereto is an air-supply passage 13 which leads to the space between the pigment nozzle 7 and the air nozzle 5, the rear end of the said passage being extended upwardly and having the mouth thereof closed by a plug 14 at the top of the head. This upwardly extended portion of the air supply passage communicates with an opening 15 extending through the upper portion of the head 3 and having one end thereof enlarged and interiorly threaded to receive the packing gland 16 while the opposite end is enlarged to form a chamber 17 and threaded for engagement with the nipple 18 by means of which communication is made with an air supply pipe. Arranged within the chamber 17 is a valve 19 designed to control the supply of air to the air nozzle and the said valve is carried by a stem 20 passing loosely through the opening 15 and the packing gland 16 and projecting outwardly beyond the head where it is capped by a nut 21. The portion of the valve stem 20 adjacent the valve 19 is reduced as indicated at 20^a and when the valve 19 is moved inwardly toward the mouth of the opening 15 the supply of air to the brush is shut off, while when the valve is moved in

the opposite direction the air passes around the valve and the reduced portion 20^a of the valve stem and enters the passage 13 which leads it to the air nozzle 5. It will thus be
5 apparent that by grasping the nut 21 and moving the stem 20 longitudinally the supply of air may be controlled and the discharge of pigment regulated as desired.

This air brush is particularly adapted for
10 use by potters and glass workers for decorating their ware. When in operation the pigment or tinting material is placed within the reservoir 1, the needle valve 9 suitably adjusted to obtain the required size of discharge
15 opening through the pigment nozzle and the discharge of the pigment controlled by suitably manipulating the air valve 19. When the air is admitted to the air nozzle 5 suction is produced within the pigment nozzle which
20 draws the pigment from the reservoir and the pigment is discharged from the nozzle in the form of a fine spray.

This air brush is adapted to be employed for house painting and artists' work and under
25 any other conditions in which it is desired to apply a coat of liquid pigment or paint to a surface of any character.

Having thus described the invention, what is claimed as new is:

30 1. In an air brush, the combination of a

reservoir, a cover for the reservoir, a head applied to the cover and provided with a nozzle and a passage leading to the nozzle, a nut extending through the cover and engaging the head and having an opening therethrough
35 in communication with the passage leading to the nozzle, and a tube carried by the nut and extending within the reservoir.

2. In an air brush, the combination of a reservoir, a cover for the reservoir, a head
40 applied to the cover and provided with a pair of passages, a pigment nozzle applied to the head and communicating with one of the passages, an air nozzle applied to the head and inclosing the pigment nozzle and communi-
45 cating with the opposite passage, a nut extending through the cover and engaging the head and having an opening therethrough in communication with that passage leading to the pigment nozzle, a tube carried by the nut
50 and extending within the reservoir, and a valve for controlling the flow of air through that passage leading to the air nozzle.

In testimony whereof I affix my signature in presence of two witnesses.

LEONARD FORESTER. [L. S.]

Witnesses:

CHARLES YOUNG,
FRED A. STONE.