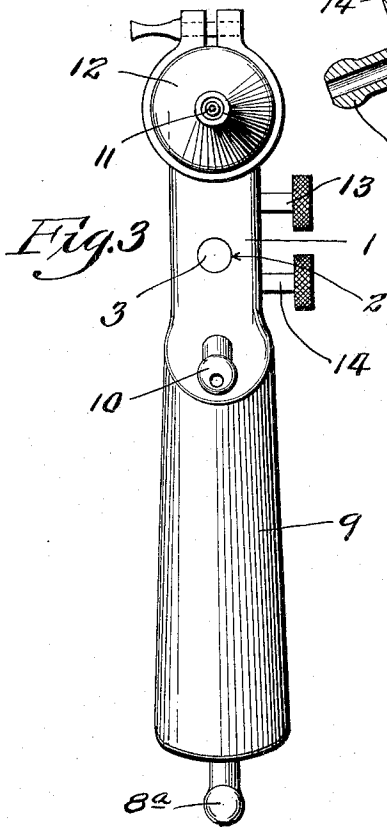
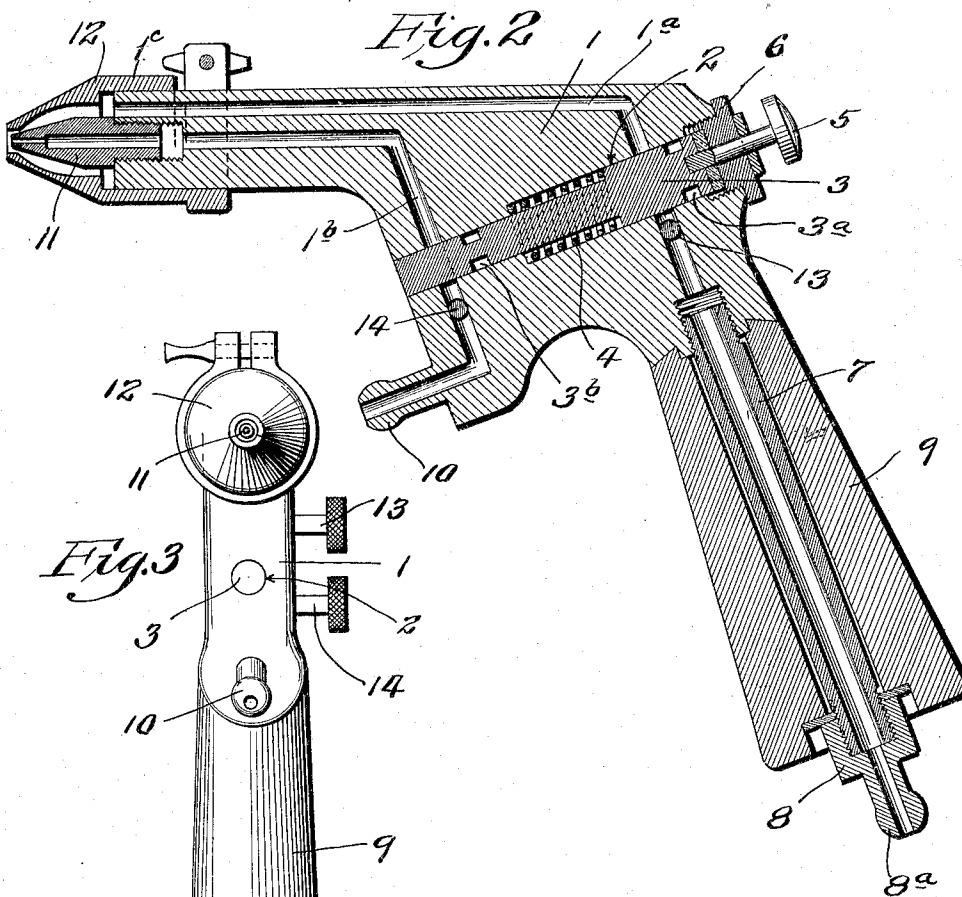
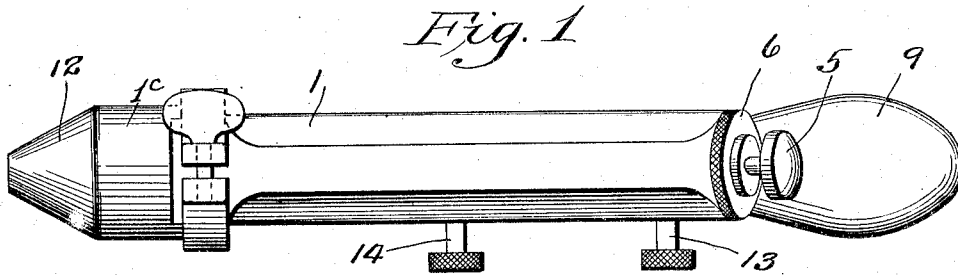


G. McD. JOHNS.
ATOMIZER.

APPLICATION FILED FEB. 20, 1919.

1,361,527.

Patented Dec. 7, 1920.



Inventor
George M^cD. Johns
By *J. M. Cornwall Atty.*

UNITED STATES PATENT OFFICE.

GEORGE McD. JOHNS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO W. N. MATTHEWS AND BROTHER, INC., OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW MEXICO.

ATOMIZER.

1,361,527.

Specification of Letters Patent.

Patented Dec. 7, 1920.

Application filed February 20, 1919. Serial No. 278,134.

To all whom it may concern:

Be it known that I, GEORGE McD. JOHNS, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain
5 new and useful Improvement in Atomizers, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had
10 to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my atomizer.

Fig. 2 is a vertical sectional view through
15 the same.

Fig. 3 is a side elevation.

This invention relates to a new and useful improvement in atomizers designed for use in spraying paint, insecticides, etc., the
20 object being to simplify the construction of devices of this kind thereby cheapening the cost of manufacture and by a common control of the material and compressed air supply, together with the independent regulation
25 of these supplies, rendering the device efficient in operation.

In the drawings, 1 indicates a casting which is provided with ducts 1^a (for compressed air) and 1^b (for the material to be
30 sprayed), said ducts extending in parallelism through a nozzle head 1^c. It is obvious that these ducts may be employed in the reverse order if desired. 2 indicates a differential valve bore intersecting the ducts
35 1^a and 1^b and in which operates a cylindrical valve 3 having reduced annuli 3^a and 3^b designed to register with the ducts 1^a and 1^b whereby a common control of said ducts may be obtained. A spring 4 tends to hold
40 the valve 3 in its outward or closed position and a button 5 is carried by the end of the valve whereby it may be manipulated. 6 is a packing nut for closing the end of the valve 4 and forming an air tight joint at
45 this point. 7 indicates a pipe screwed into the casting 1 and communicating with the duct 1^a. The lower end of this pipe is threaded to receive a nut 8 on which is a nipple 8^a for connection to a flexible tube,
50 not shown, leading from a source of compressed air supply. 9 indicates a handle having a tooth or projection at its upper end designed to fit into a recess in casting 1

whereby the handle is prevented from rotation. The handle is secured in position by
55 means of the nut 8.

10 indicates a nipple communicating with a duct 1^b and which is designed to be connected to a flexible tube, not shown, leading
60 from a source of material supply. The duct 1^b extends axially through the barrel of the atomizer and terminates in a nipple 11. The duct 1^a also extends from the barrel of the atomizer and terminates to one side of the
65 nipple 11 and within the chamber of a nozzle 12, the details of which are disclosed and claimed in Patent No. 1,330,448, dated February 10, 1920.

In order to independently regulate the passage of compressed air and material
70 through the ducts 1^a and 1^b, I provide the casting 1 with threaded openings which intersect said ducts and in which openings are mounted valves 13 and 14, respectively, said
75 valves having knurled heads at their outer ends by which they may be turned and adjusted.

In operation, the tubes leading from the source of compressed air supply and material supply are connected, respectively, to
80 the nipples 8^a and 10, after which the valves 13 and 14 are properly adjusted and then by operating the valve 3 through the medium of the button head 5, the operator is enabled to secure the proper spraying of
85 the material.

It will be readily understood that minor changes in the size, form and construction of the various parts of my atomizer may be made and substituted for those herein shown
90 and described, without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

What I claim is:

1. An atomizer comprising a casting provided with a nozzle head and a nozzle, ducts passing through said casting and nozzle head, means traversing each duct for restricting the flow of fluid therethrough, and an operating valve for controlling the pas-
95 sage through both of said ducts.

2. An atomizer comprising a casting provided with a nozzle head and a handle, ducts passing through said casting and nozzle head, means located in each duct for re-
105 stricting the flow of fluid therethrough, and

an operating valve independent of the afore-said means for controlling the flow of fluid through said ducts.

3. An atomizer comprising a casting provided with a nozzle head and a nozzle, ducts
5 passing through said casting and nozzle head, threaded openings in the casting and

traversing each duct, valves screw-seated in said openings, and an operating valve for controlling the passage through said ducts. 10

In testimony whereof I hereunto affix my signature this 17th day of February, 1919.

GEO. McD. JOHNS.