

T. CADWALLADER.
LAWN SPRAY NOZZLE.
APPLICATION FILED MAR. 31, 1909.

Patented Aug. 31, 1909.

932,958.

Fig. 1.

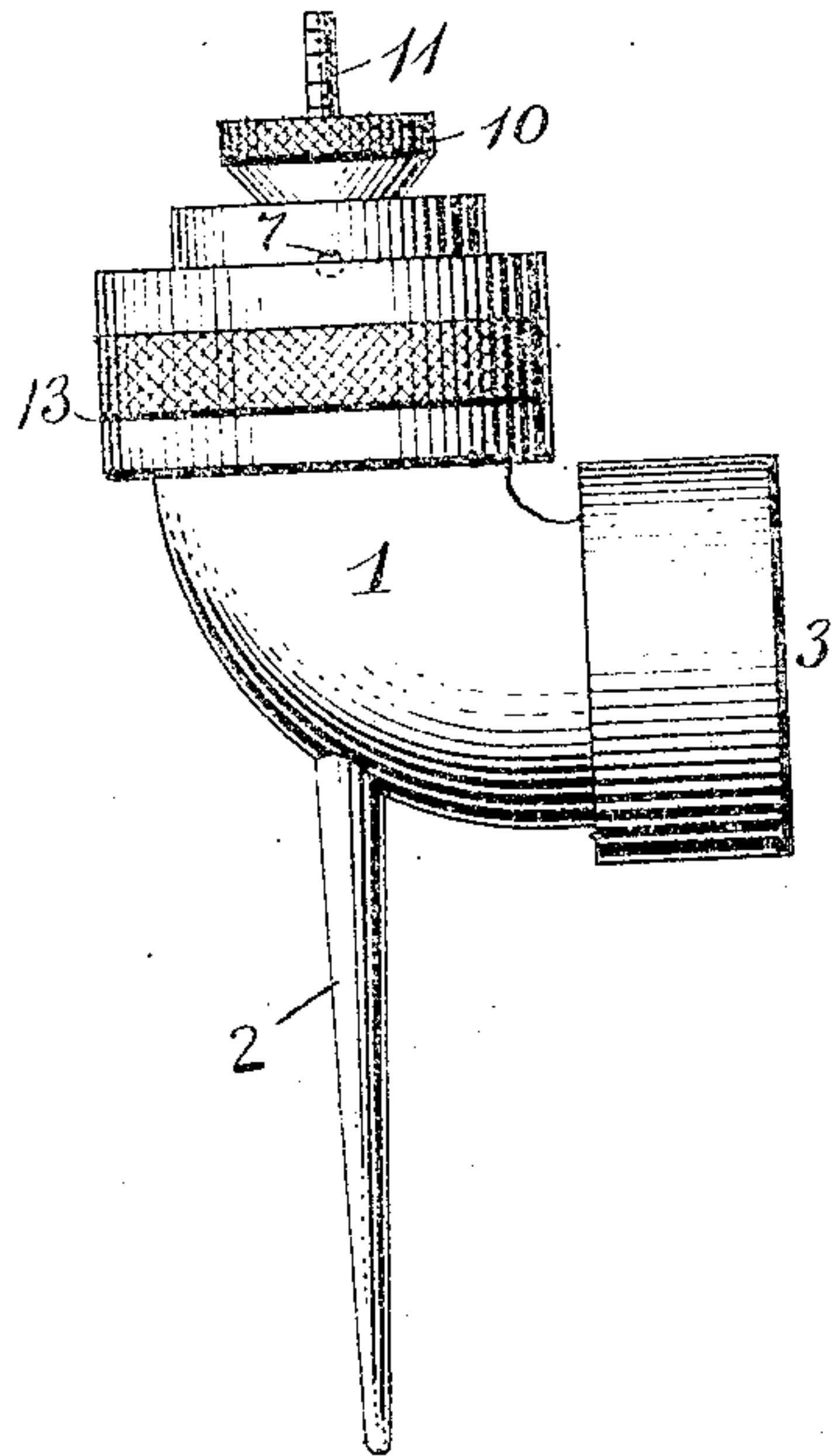


Fig. 2.

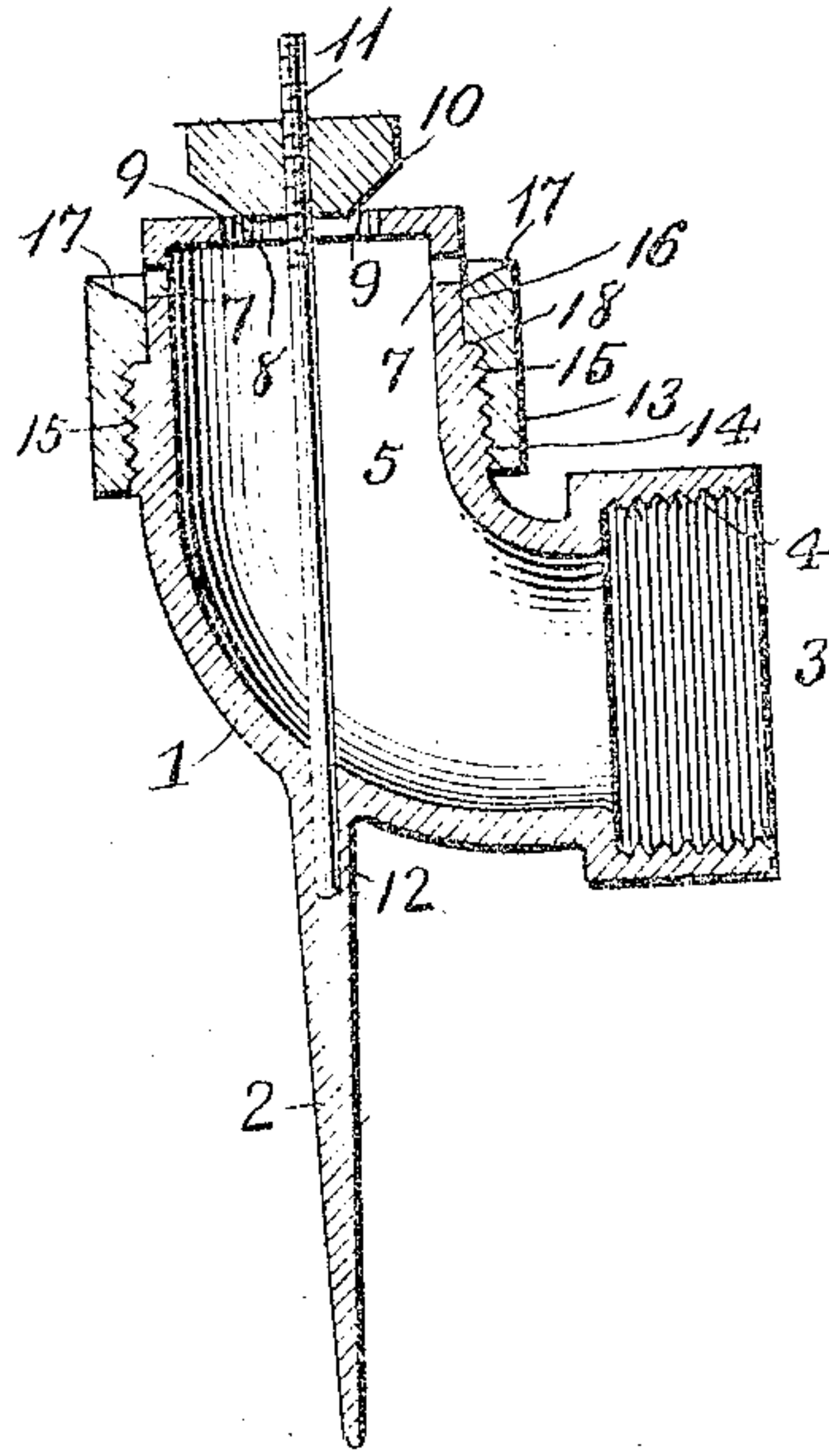
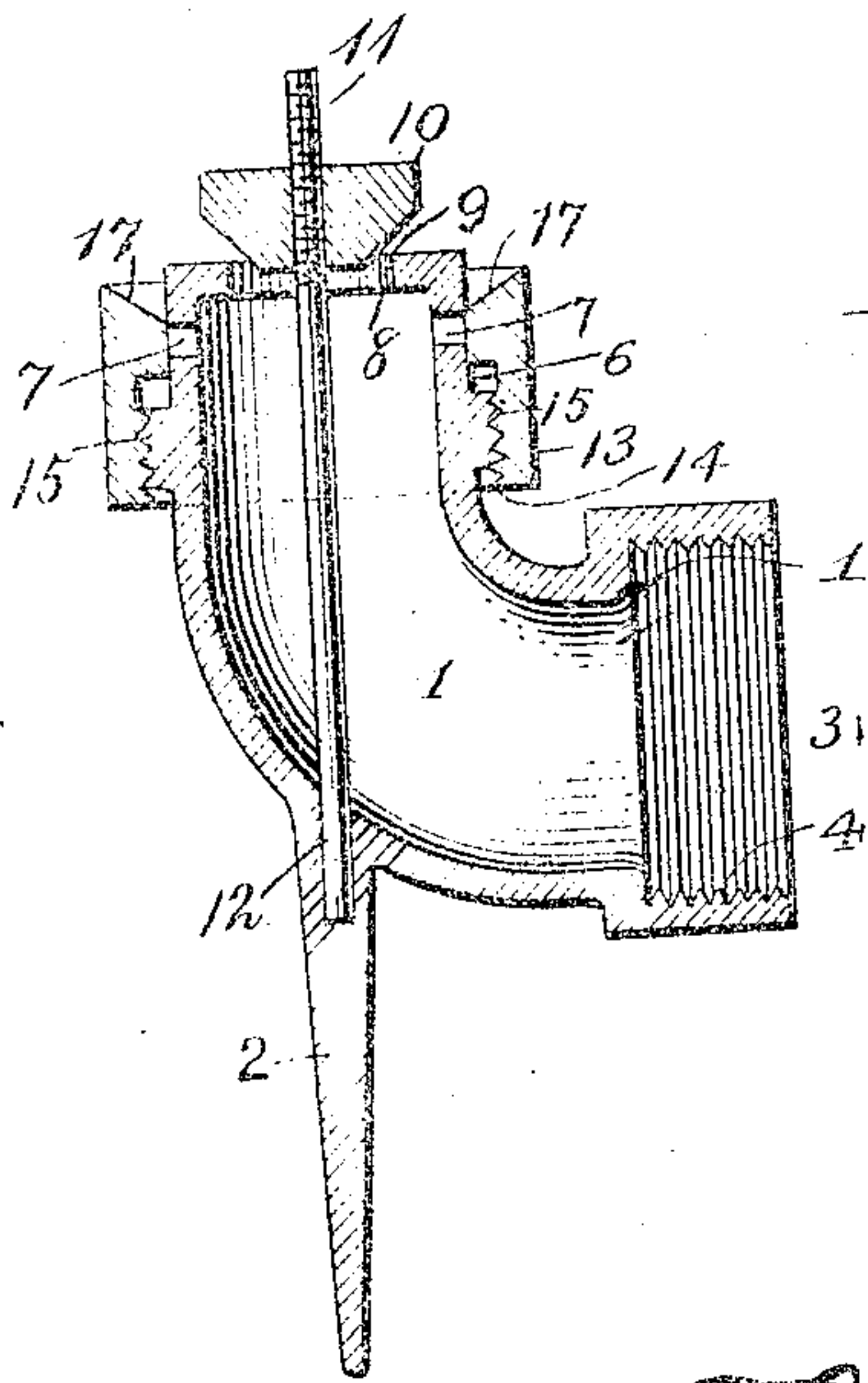


Fig. 3.



Inventor

T. Cadwallader.

Witnesses
J. L. O'Connell
H. Parker Reynolds

By D. C. Reynolds

Attorney

UNITED STATES PATENT OFFICE.

THOMAS CADWALLADER, OF SALEM, OHIO.

LAWN-SPRAY NOZZLE.

932,958.

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To all whom it may concern:

Be it known that I, THOMAS CADWALLADER, a citizen of the United States, residing at Salem, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Lawn-Spray Nozzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to nozzles for spreading water, has especial reference to spray nozzles used for spraying water on lawns and the like, has for its object a cheap, efficient and durable structure for the purpose, and consists in certain improvements in construction, which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification:—Figure 1 represents a side elevation of a spray nozzle embodying my invention. Fig. 2 a vertical longitudinal section showing the lateral discharge passages open or uncovered, and Fig. 3 a like view showing said passages closed.

Reference being had to the drawings and the designating characters thereon, the numeral 1 indicates the body of the nozzle, 2 a stem to be inserted in the ground to support the nozzle while in use. 3 the receiving end provided with an internal screw-thread 4 for attachment to a hose, not shown. 5 a chamber at the discharge end of the nozzle provided with a cylindrical wall 6 in which are lateral discharge passages 7, of which there may be any desired number, and in the end 8 is a discharge opening 9, which is controlled by a conical valve 10 adjustably supported on a stem 11 which extends through the chamber 5 and is secured to the body 1 at 12.

Surrounding the wall 6, is an annular sleeve 13 provided with an internal screw thread 14 which engages a threaded portion 15 on the body of the nozzle and on which the sleeve is vertically adjustable to control the discharge of water through the lateral passages 7, by means of a horizontal and inwardly extending annular valve or lip 16 whose width is equal to the diameter of the passages 7, and on the upper end of the sleeve adjacent to the valve 16 is an outwardly flared or beveled annular surface 17, against which the water issuing from the passages 7 impinges and is disintegrated or

reduced into spray and directed outward from the nozzle in an annular cloud like body.

The valve 10 on the end of the nozzle may be used in conjunction with the valve 16, and increases the volume of water discharged from the nozzle and its discharge is projected in substantially the same direction as the water discharged from the passages 7.

The volume of the discharge of water may be regulated from the maximum capacity of the nozzle to a spray of any desired fineness by the adjustment of the valves 10 and 16, and by the use of either valve singly or by using the two in conjunction with each other.

It is obvious that changes may be made in the details of construction without departing from the spirit of my invention. For example, the passages 7, may be drilled at an angle on one side of the center of the chamber 5, which will cause the water to strike the line 17 at an angle and impart a circular motion to the water as it is discharged.

Having thus fully described my invention, what I claim is:—

1. A spray nozzle having an opening in the discharge end thereof, a valve adjustable at a right angle to the plane of said opening, lateral discharge passages adjacent to said end, an outwardly flaring annular surface adjacent to said passages, and means for controlling the discharge of water through the lateral passages.

2. A spray nozzle having an opening in its discharge end, a conical valve in said opening and adjustable at a right angle to the plane of the opening, lateral passages adjacent to said end, and an adjustable sleeve having an outwardly flaring annular surface adjacent to said passages.

3. A spray nozzle having an opening in the discharge end thereof, a conical valve adjustable in said opening, lateral passages adjacent to said end, an adjustable sleeve provided with an annular valve to control the discharge of water through said passages, and having an outwardly flaring annular surface at its end and opposite said passages.

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

THOMAS CADWALLADER.

Witnesses:

D. J. HANNA,
R. C. KRIDLER.