

Dec. 23, 1924.

1,520,048

C. M. C. BAIRD

SPRAY NOZZLE

Filed Feb. 16, 1924

Fig. 1.

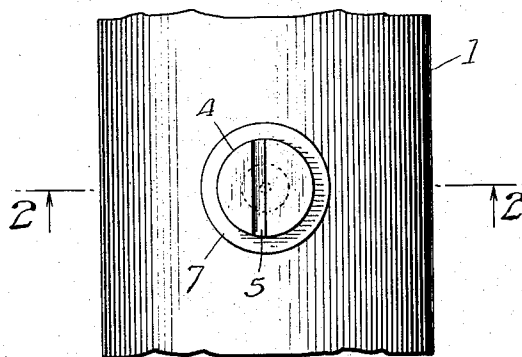


Fig. 2.

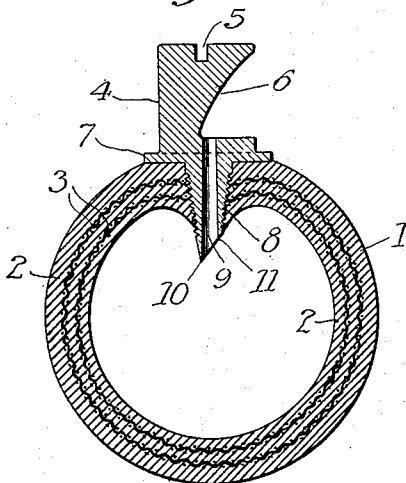


Fig. 3.

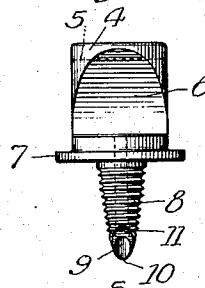


Fig. 4.

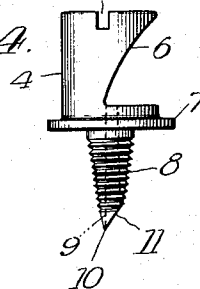
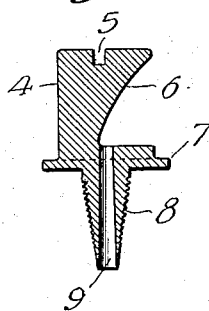


Fig. 5.



Witness
Martin H. Olsen.

Inventor
Cassius M. Clay Baird
By *Rummler & Rummler*
Atty's

UNITED STATES PATENT OFFICE.

CASSIUS M. CLAY BAIRD, OF CHICAGO, ILLINOIS.

SPRAY NOZZLE.

Application filed February 16, 1924. Serial No. 693,218.

To all whom it may concern:

Be it known that I, CASSIUS M. CLAY BAIRD, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Spray Nozzles, of which the following is a specification.

This invention relates to garden hose provided with spray nozzles secured thereto at intervals along its length so that the ordinary flexible garden hose may be employed for sprinkling a relatively large area.

The present application for patent is a continuation in part of the previously filed application No. 516,726, filed November 21, 1921.

The object of the invention is to provide a spray nozzle having a threaded conical nipple with a small sharpened point at the end of the nipple so that the nozzle may be forced into the side of a rubber hose of standard construction without injury to the fabric. It is also a purpose of the invention to provide a construction which will insure a permanently water-tight connection and prevent access of moisture to the fabric of the hose.

The objects of the invention are accomplished by the construction illustrated in the drawing, in which:—

Figure 1 is a plan view of a fragment of garden hose equipped with one of the spray nozzles.

Fig. 2 is a sectional view taken along the line 2—2 of Fig. 1.

Fig. 3 is a side view of the spray nozzle.

Fig. 4 is another side view of the spray nozzle taken at right angles to the view shown in Fig. 3.

Fig. 5 shows a slightly modified construction in which the sharpened end of the threaded nipple is not beveled off at one side as shown in the remaining figures.

The improved spraying device may be applied to a garden hose by hand or with the use of pliers simply by forcing and screwing the sharpened threaded nipple of the device through the wall of the hose. Without preliminary puncturing of the hose, the shape of nipple permits it to be screwed through rubber and fabric so as to spread fabric without injuring same. The fabric used in garden hose is frequently of very open mesh, and, therefore, the spray device when applied to the hose, merely spreads the

meshes of the fabric without cutting it. The conical nipple also wedges the rubber body part of the hose outwardly, and the rubber lining resiliently engages the nipple, preventing water from traveling upwardly along the exterior of the nipple to the fabric. The fabric should be kept dry since when water is permitted to travel along the fabric, the hose deteriorates faster than ordinarily.

The drawing shows a flexible garden hose 1 formed as usual of a series of rubber tubes 2, separated by the fabric tubes 3. The spray nozzle includes a head 4 slotted at 5 for receiving a screw driver, if desired, and having a concave recess 6 in its side above the circular flange 7. The tapered threaded nipple or shank 8 is provided with an axial perforation 9 for conducting and projecting water from the hose against the concave surface of the recess 6, this surface serving to spread the jet of water. The end 10 of the conical nipple is sharpened, and to further bring it to a point, the end of the nipple may be beveled off as at 11.

In applying the spray nozzles to the garden hose, it is merely necessary to screw them down tightly into position, the tapered nipple serving to spread the fabric and the rubber of the hose without much injury thereto. The nozzle nipples may be dipped in rubber cement before applying the nozzles to the hose, but this is not essential for a water-tight connection, since the conical nipples merely spread the rubber outwardly and downwardly, resulting in the rubber becoming compressed around the nipples.

I claim:

1. A spray nozzle of the class described comprising a body having a head and a conical threaded hollow nipple sharpened at its end.
2. The combination with a garden hose of a spray nozzle comprising a body having a head, and a conical threaded hollow nipple sharpened at its end and extending through the side of the hose.
3. A spray nozzle of the class described comprising a body having a head and a conical threaded hollow nipple sharpened at its end, said head having a spreading and deflecting surface in position to be engaged by fluid passing through said nipple.
4. A spray nozzle of the class described comprising a body having a head and a conical threaded hollow nipple, said head hav-

ing a spreading and deflecting surface in position to be engaged by fluid passing through said nipple, and the end of said nipple being beveled off at one side to bring it to a point.

- 5 5. The combination with a garden hose of a spray nozzle, comprising a head and a threaded hollow nipple sharpened at its end

whereby the nipple may be screwed through the rubber and fabric of the hose so as to spread the fabric without injuring the same. 10
Signed at Chicago this 11th day of February, 1924.

CASSIUS M. CLAY BAIRD.