

R. PORTER & L. KRUEGER.
HOSE NOZZLE AND SPRAYER.
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1,016,173.

Patented Jan. 30, 1912.

Fig. 1.

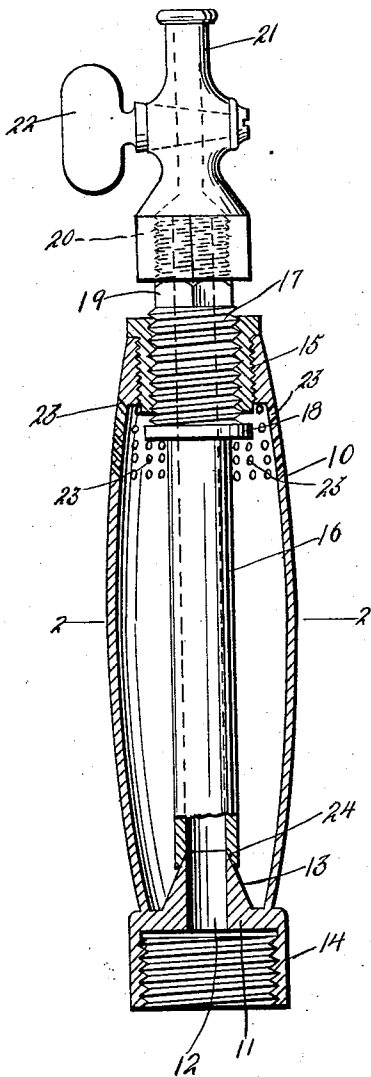


Fig. 2.

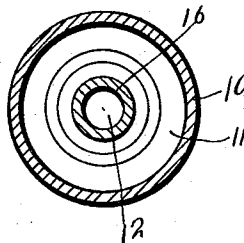
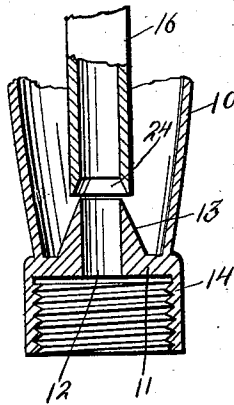


Fig. 3.



Witnesses
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By

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UNITED STATES PATENT OFFICE.

ROSS PORTER AND LOUIS KRUEGER, OF NEODESHA, KANSAS.

HOSE-NOZZLE AND SPRAYER.

1,016,173.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ROSS PORTER and LOUIS KRUEGER, citizens of the United States, residing at Neodesha, in the county of Wilson, State of Kansas, have invented certain new and useful Improvements in Hose-Nozzles and Sprayers; and we 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.

This invention relates to improvements in hose nozzles, and has for one of its objects to provide a simply constructed device of this character whereby the discharge may be controlled to produce a spraying effect or a direct discharge, as may be preferred.

Another object of the invention is to provide a device of this character whereby a combined spraying and direct discharge may be produced, as required.

With these and other objects in view, the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claims; and, in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a longitudinal sectional elevation of the improved device, Fig. 2 is a transverse section on the line 2—2 of Fig. 1, Fig. 3 is a sectional detail illustrating the operation of the spraying portion of the improved device.

The improved device comprises a shell 10, preferably with swelling sides, as shown, and with one end closed at 11 and with an intake aperture 12 through the closed end. A valve seat 13 is formed upon the inner face of the closed end 12 and an internally threaded sleeve 14 extends beyond the closed end, the sleeve designed to receive an ordinary hose connection, not shown. At its opposite end the shell 10 is provided with an internally threaded aperture, and fitting in this aperture is an externally and internally threaded bushing, 15. Extending into the shell 10 is a tubular stem 16 having a threaded portion 17 which engages in the bushing 15. The stem 16 is provided with a stop shoulder 18 adapted to engage against

the inner end of the bushing and limit the movement of the stem in one direction. At its outer end the stem 16 is provided with a wrench receiving portion 19 and is externally threaded, as indicated at 20, beyond the wrench receiving portion. This latter threaded portion is designed to receive a discharge member 21 having a controlling valve 22 therein. At its inner end the stem 16 is provided with an internal seat 24 engaging over the seat 13 when the stem is disposed in one position, as shown in Fig. 1, and thus cutting off the flow through the aperture 12 and causing it to pass through the stem and the discharge member 21, and prevented from entering the shell, and then when the stem is rotated by a wrench or other implement applied to the surface 19 the stem is moved longitudinally within the shell and away from the seat 13, and thus permits the water to pass into the shell between the members 13 and 16, as represented in Fig. 3.

By this simple arrangement when a direct flow is desired the stem 10 is rotated in one direction to connect its seat 24 with the seat 13 and the valve 22 opened. Then when it is desired to produce a spray the valve 22 is closed and the stem 16 rotated in the opposite direction to move the seat 24 away from the seat 13 and thus permit the flow to pass into the shell and thence outwardly through orifices 23 in the shell. The orifices 23 may be of any suitable size, but will preferably be relatively fine so that a correspondingly fine spray will be produced. If it is desired to produce a combined free discharge and spray effect the valve 22 may be left open and the stem 16 moved into its outward position, as shown in Fig. 3.

The improved device is wholly of metal, and will generally be constructed of brass or like material, and may be plated or otherwise ornamented and protected, and may be constructed of any required size to fit hose couplings of different sizes.

What is claimed is:—

A hose nozzle, comprising a casing having spraying orifices and with hose coupling means at one end, said end being further provided with an inwardly extending valve

seat, a bushing threaded into the opposite
end of said casing, a tubular stem threaded
through said bushing and with its inner
end adapted to engage with said valve seat,
5 a shoulder formed on said stem and adapted
to engage the bushing to limit its outward
movement, and a valved discharge member
secured to the outer end of said stem.

In testimony whereof, we affix our signatures, in presence of two witnesses.

ROSS PORTER.
LOUIS KRUEGER.

Witnesses:

O. W. THOMPSON,
HARVEY MOORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
