

No. 676,526.

Patented June 18, 1901.

A. ANDERSON.  
HOSE OR PIPE NOZZLE.  
(Application filed Aug. 31, 1900.)

(No Model.)

Fig. 1.

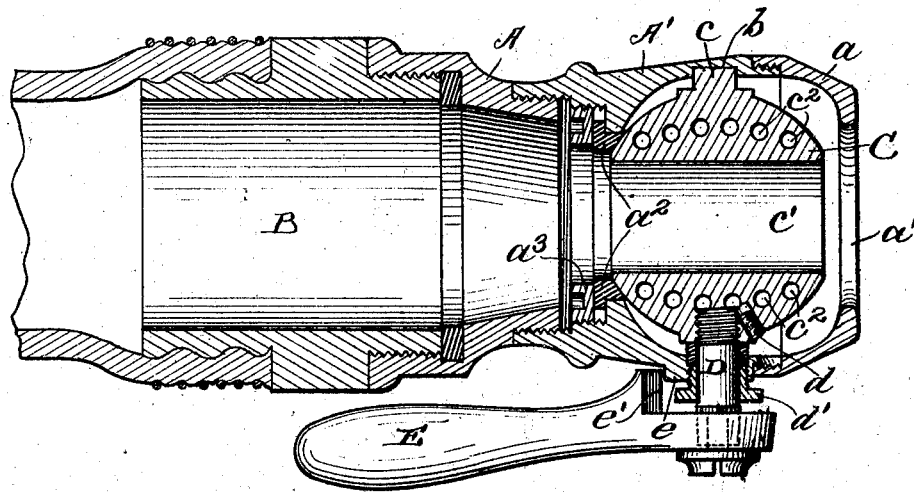


Fig. 2.

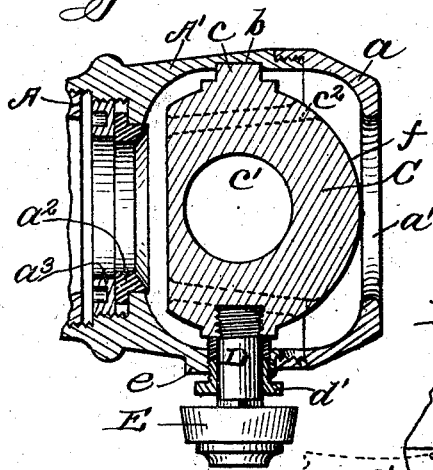


Fig. 3.

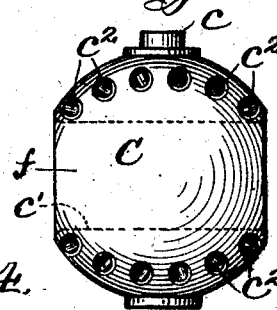
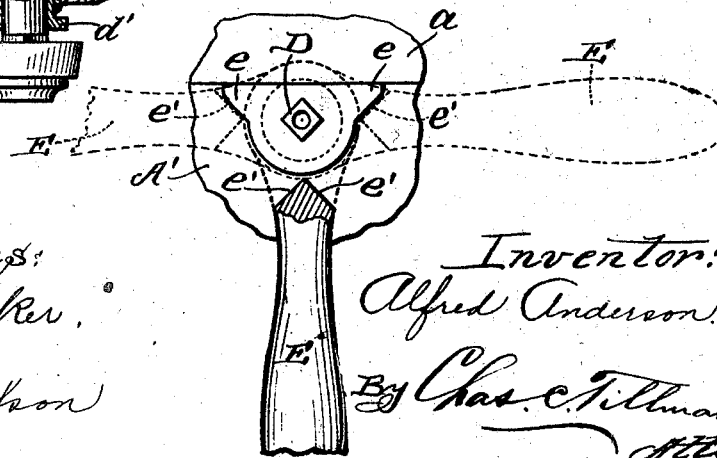


Fig. 4.



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# UNITED STATES PATENT OFFICE.

ALFRED ANDERSON, OF CHICAGO, ILLINOIS.

## HOSE OR PIPE NOZZLE.

SPECIFICATION forming part of Letters Patent No. 676,526, dated June 18, 1901.

Application filed August 31, 1900. Serial No. 28,684. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED ANDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Nozzles for Pipes or Hose, of which the following is a specification.

This invention relates to improvements in a nozzle to be attached to a water-pipe or a fireman's hose; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The object of my invention is to provide a nozzle of simple and inexpensive construction which may be readily attached to a pipe or piece of hose and which shall be of such construction that a stream of water flowing therethrough may be changed into a spray or may be shut off entirely.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of a nozzle embodying my invention and showing it attached to a piece of hose. Fig. 2 is a similar view of the front portion of the nozzle, showing the valve turned to the position to change the stream of water into spray. Fig. 3 is a detached view in elevation of the valve; and Fig. 4 is a fragmental view, partly in elevation and partly in section, of the valve-handle and a part of the casing.

Similar letters refer to like parts throughout the different views of the drawings.

A represents a tubular coupling-piece which is internally screw-threaded at one of its ends to engage screw-threads on a portion of the pipe or hose B. The other end of the coupling-piece A is externally screw-threaded to engage screw-threads on the casing A', which is provided at its front end with a removable cap  $a$ , having a central opening  $a'$ , through which the water and spray pass. The casing A' is provided in its interior, adjacent to the piece A, with a washer  $a^2$ , which is held in position by means of a lock-nut  $a^3$ , engaging the internal screw-threads of the casing.

The inner surface of the casing A' is provided with a recess  $b$  for the reception of a stub-shaft  $c$  on the valve C, which is substantially globular in form and has a central opening  $c'$  extending therethrough and a series of perforations  $c^2$  passing therethrough at right angles to the opening  $c'$ , yet obliquely through the valve, as is clearly shown by dotted lines in Fig. 2 of the drawings. The casing A' is provided, opposite the recess  $b$  therein, with an opening through which the shaft D on which the handle E is secured extends and which shaft is screwed into an opening in the valve located diametrically opposite the stub-shaft  $c$  thereon. The shaft D is prevented from turning in the valve by means of a set-screw  $d$ , which is located in a suitable opening in the valve, so that it may engage the said shaft. Around the shaft D and in the opening in the casing A' therefor is located a bushing  $d'$ , which is preferably screw-threaded externally and engages screw-threads in the said opening of the casing A', which is provided on its outer surface, on each side of the opening through which the shaft D extends, with angular ears or lugs  $e$ , against which similarly-formed portions  $e$  on the handle E will contact when the handle is turned in the directions shown by dotted lines in Fig. 4 of the drawings and will prevent the further turning of the handle in either direction.

By reference to Fig. 2 of the drawings it will be seen that the openings  $c^2$  in the valve C are made obliquely therethrough, so that when the valve is turned to the position shown in said figure and to cause or produce a spray the inner ends of the openings will be near the periphery of the opening in the casing A' and the outer ends of the opening  $c^2$  will be near the periphery of the opening  $a'$  in the cap of the casing and in such positions as to cause the water to strike the said cap. When the valve is turned in the opposite direction from that shown in Fig. 2 of the drawings, the rounded portion  $f$  will sit in the opening of the washer  $a^2$  and entirely shut off the flow of water. When it is desired to discharge a stream of water, the valve is turned to the position shown in Fig. 1 of the drawings, so that the opening  $c'$  in the valve will

be in alinement with the opening *a'* in the cap *a* and also in alinement with the opening in the casing.

5 Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 In a nozzle, the combination of a casing having means to secure it to a pipe or hose, and provided in its front and rear portions with contracted openings, with a valve jour-

ing and provided with a central opening and a series of openings inclined in the same plane but at right angles to the central open- 15 ing, lugs on the casing near the journal of the valve, and a handle rigidly secured to the valve for turning the same said handle being provided with lugs to engage those on the casing, substantially as described.

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