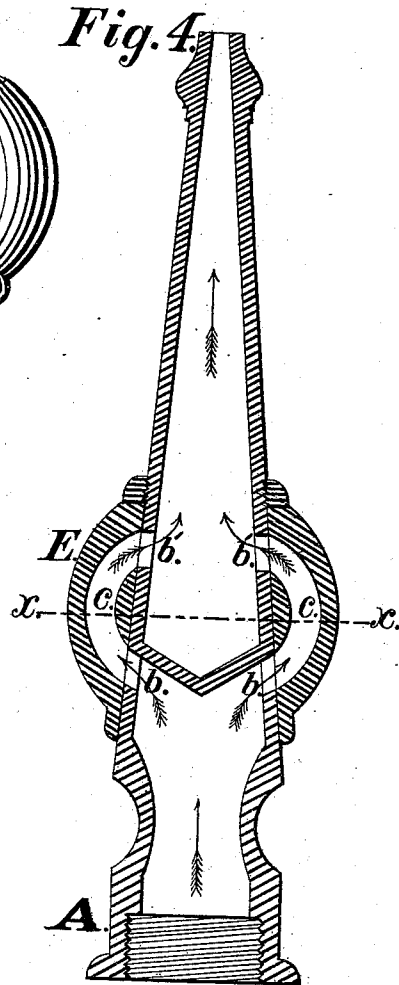
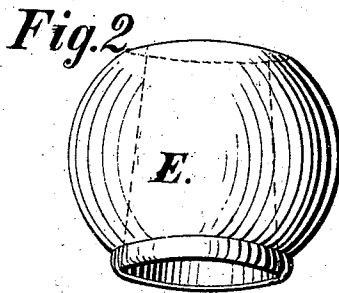
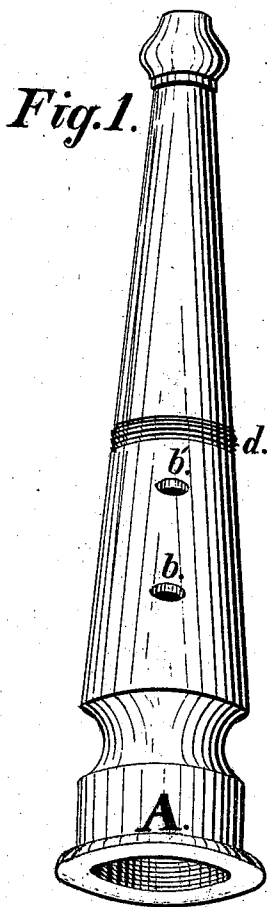


J. D. CARMODY & A. CRAWFORD.

HOSE-PIPE NOZZLE.

No. 173,388.

Patented Feb. 15, 1876.



Witnesses;  
Chas. C. Marsh,  
Henry H. Buckley

Inventors;  
J. D. Carmody  
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# UNITED STATES PATENT OFFICE.

JAMES D. CARMODY AND ALEXANDER CRAWFORD, OF EVANSVILLE,  
INDIANA; SAID CARMODY ASSIGNOR TO SAID CRAWFORD.

## IMPROVEMENT IN HOSE-PIPE NOZZLES.

Specification forming part of Letters Patent No. **173,388**, dated February 15, 1876; application filed  
June 18, 1875.

*To all whom it may concern:*

Be it known that we, JAMES D. CARMODY and ALEXANDER CRAWFORD, both of Evansville, Indiana, have invented a Hose-Pipe Nozzle, of which the following is a specification:

The object of our invention is to make an improvement in turning on and shutting off the water in that class of hose-pipe nozzles in which the ordinary stop-cock is dispensed with. Unlike all other nozzles of this class we construct ours in one entire piece, and not in two sections.

A, Figure 1, is a perspective view of the nozzle. The water does not pass straight through it from end to end, but after entering the nozzle at the base is first conducted through the ports *b* outside of the nozzle, then reconducted through like ports *b'* back into the barrel or bore of the nozzle, and out. This circuitous course of the water is produced by means of stopping up the bore of the nozzle between the ports *b* and the ports *b'*, and by means, also, of the revolving conductor E, Fig. 2, which has water-ways in its interior, as shown in the sectional views of the same, Figs. 4 and 5. The water-ways *c* in the revolving conductor have their mouths or ports so constructed as to correspond to, and form communication with, the ports *b* and *b'* whenever it may be desired to throw a stream of water, by simply turning the revolving conductor with the hand and causing it to revolve on and around the nozzle on which it is placed as a ring, and held to its place by the milled nut, Fig. 3, screwed onto the nozzle at *d*, Fig. 1. The revolving conductor fits the nozzle

over the ports *b* and *b'*, as shown in Fig. 4, where it turns on the nozzle and forms with it a ground joint. Fig. 5 is a sectional view of the revolving conductor, cut across its water-ways at the place indicated by the line *x x*, in Fig. 4, which is a longitudinal sectional view of the nozzle, Fig. 1, and shows, also, cut at right angles to the sectional view in Fig. 5, a sectional view of the revolving conductor with its water-ways *c* so turned as to correspond to, and communicate with, the ports *b* and *b'*. The arrows indicate the course of the water as it enters the nozzle, passes out of the nozzle, through the ports *b* into the revolving conductor along the water-ways *c*, and back through the ports *b'* into the barrel of the nozzle, and out. By causing the conductor to make part of a revolution the mouths of the water-ways *c* are carried past the ports *b* and *b'*, with which they approximate, as shown in Fig. 5, and the water is thereby shut off. It is let on by again turning the conductor so that its water-ways correspond with, and open into, said ports in the nozzle.

We claim as our invention—

1. The nozzle A, Fig. 1, made with the two sets of ports *b* and *b'*, and the barrel of the nozzle permanently closed between said ports and made in one piece.

2. The combination of the nozzle A and the revolving conductor E, Fig. 2, adapted thereto, as and for the purposes described.

JAMES D. CARMODY.  
ALEX. CRAWFORD.

Witnesses:

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