C. OYSTON.

Hose-Nozzle.

No. 166,803. Patented Aug. 17, 1875.

Fig. 1

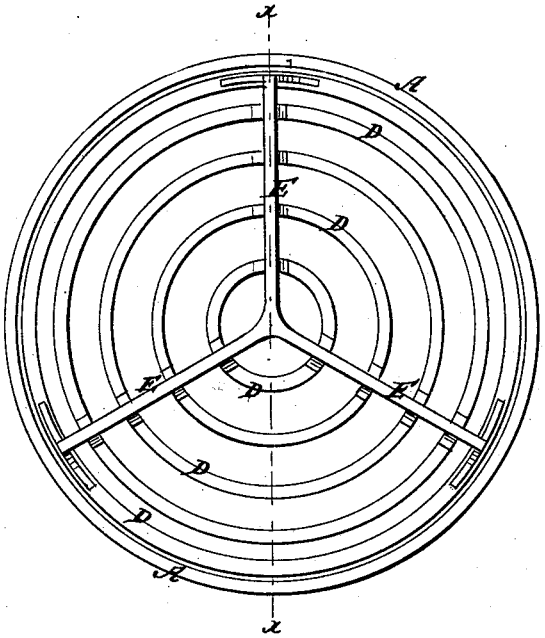
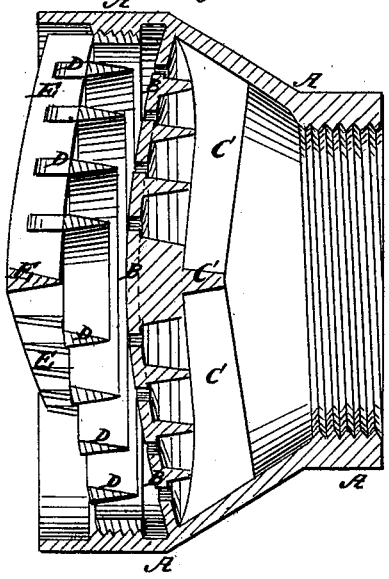


Fig. 2



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES OYSTON, OF LITTLE FALLS, NEW YORK.

IMPROVEMENT IN HOSE-NOZZLES.

Specification forming part of Letters Patent No. **166,803**, dated August 17, 1875; application filed June 26, 1875.

To all whom it may concern:

Be it known that I, CHARLES OYSTON, of Little Falls, in the county of Herkimer and State of New York, have invented a new and useful Improvement in Hose-Nozzle, of which the following is a specification:

Figure 1 is a front view of my improved nozzle. Fig. 2 is a detail section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a hose-nozzle for extinguishing fires, which shall be so constructed as to divide up the stream of water into a fine spray, which shall not be liable to foul with mechanical impurities contained in the water, and at the same time shall offer the least possible resistance to the escape of the water.

The invention consists in the plate provided with concentric annular openings, in combination with the connecting-arms and the shell of the nozzle, and in the concentric ring-wedges and their connecting-arms, in combination with the shell, and with the concentric annular openings of the plate, as hereinafter fully described.

A is the shell of the nozzle, the inner part of which is made cylindrical in form, and in its inner surface is cut a screw-thread to screw upon the hose or pipe. The middle part of the shell A is made flaring or conical, and the outer part is cylindrical. B is a plate, the outer side of which is slightly convex, and its inner side slightly concave, and the outer edge of which joins the shell A at the angle between the flaring middle part and the outer cylindrical part of said shell. In the plate B are formed a number of concentric annular openings. The ring parts of the plate B, between the annular openings, are connected with three arms, C, the outer ends of which are connected with the flaring middle part of the shell A. The inner ends of the arms C are connected with each other, and with the circular middle part of the plate B. The parts of the nozzle thus far described may all be cast in one piece. D is a series of concentric ring-wedges, which are connected together by three arms, E, and in the outer surface of the outer ring is cut a screw-thread to screw into a screw-thread cut in the inner surface of the outer cylindrical part of the shell A. The ring-wedges D and arms E are cast in one piece, and the said ring-wedges D are so arranged that their edges may be directly opposite the annular openings in the plate B, so as to divide up the ring-sheets of water as it passes out through said annular openings.

This construction allows the annular openings to be made larger, so that they will not be liable to foul with mechanical impurities that may be in the water, while at the same time reducing the water to a fine spray, and offering the least possible obstruction to the escape of the water.

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

1. The plate B, provided with concentric annular openings, in combination with the arms C and the shell A, substantially as herein shown and described.

2. The concentric ring-wedges D and their connecting-arms E, in combination with the shell A, and with the concentric annular openings of the plate B, substantially as herein shown and described.

CHARLES OYSTON.

Witnesses:
IRVING SNELL,
ROLLIN H. SMITH.