H. HUNT.

HOSE-NOZZLE.

No. 187,635. Patented Feb. 20, 1877.

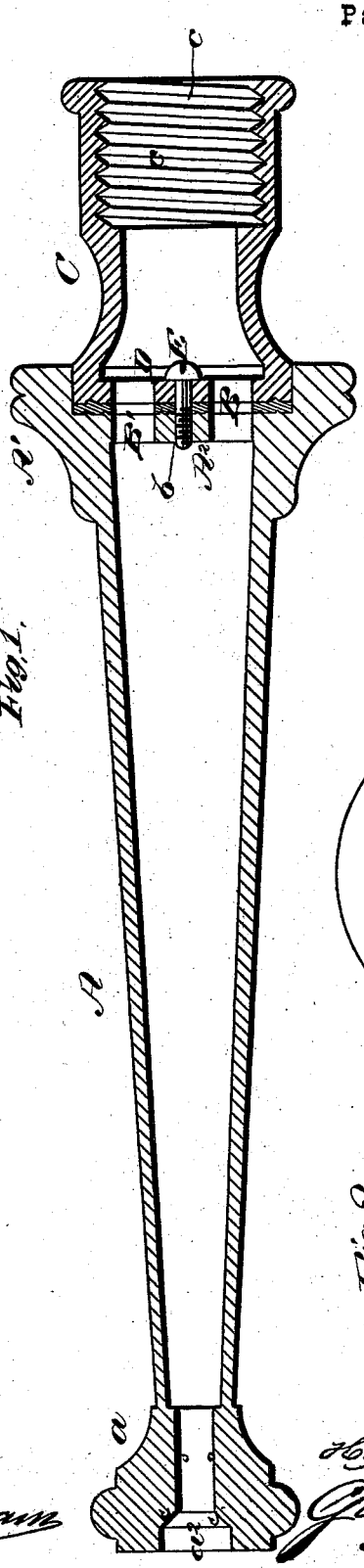

Fig. 1.

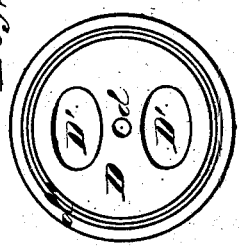

Fig. 4.

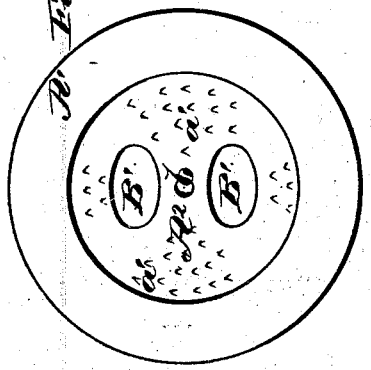

Fig. 3.

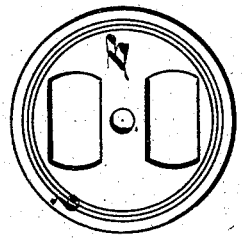

Fig. 2.

WITNESSES

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HARRY HUNT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN HOSE-NOZZLES.

Specification forming part of Letters Patent No. **187,635**, dated February 20, 1877; application filed January 13, 1877.

To all whom it may concern:

Be it known that I, HARRY HUNT, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and valuable Improvement in Hose-Nozzles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a central vertical section of my hose-nozzle; and Figs. 2, 3, and 4 are detail views thereof.

The object of this invention is to regulate the volume of water delivered through a hose-nozzle by means of easily adjustable and replaceable devices; also, to prevent the outflowing stream from being spattered or broken up.

In the annexed drawing, A designates a tapering tubular hose-nozzle, having a slightly-enlarged tip, *a*, and an expanded base, A^1, of annular shape. At the line where said nozzle begins to taper it is provided with a transverse disk-shaped partition, A^2, (shown in Fig. 1,) which has on its rearward or lower side a number of serrations, a^1, which hold a detachable leather disk, B, to said partition. Two opposite oblong openings, B′ B′, extend through said disk and partition, as does also a central internally screw-threaded perforation, *b*.

C designates a shell or casing, the rear part of which is internally screw-threaded at *c*, so as to form part of a hose-coupling, and the forward end of which is formed with a disk, D, adapted to set into expanded base A^1, and against leather disk B. Said metal disk D is provided with a central perforation, *d*, which corresponds to perforation *b*, but is not screw-threaded, and with two opposite oblong openings, D′ D′, which register with openings B′ B′, already described. Said disks are held more closely together by an annular bead, *b*′, on leather disk B, and a complementary annular groove, *d*′, on disk D.

E designates a screw-threaded bolt, which passes down through perforation *d*, and screws into screw-tapped perforation *b*, thereby clamping all of the above-described parts together.

When a full stream of water is desired, the openings B′ and D′ are allowed to fully register.

To lessen the stream, disk D is turned (by turning casing C) until only a part of each of said openings is unclosed. The degree of rotation regulates the decrease of the apertures, and the consequent diminution of the water-supply.

By turning said casing a sufficient distance, the supply may be entirely cut off.

Bolt E clamps the above devices in any desired position of such rotary adjustment, and whenever a new adjustment is desired, said bolt is loosened sufficiently to allow the same.

The employment of leather disk B protects metal partition A^2 and metal disk D from being injured by friction, especially during the above-described rotary adjustments. Said disk B is easily removable when worn, and another may easily be substituted for it. In these removable disks any soft material capable of fulfilling the same office may be used instead of leather.

It has been found that the stream of water issuing from a hose-nozzle is often spattered and broken up by the resistance of the inner edges of the perforated nozzle-tip. I remedy this defect by slightly enlarging the tube of said nozzle A at said tip *a*, so as to form a mouth, a^2, (shown in Fig. 1,) which allows the air to press upon all sides of the outflowing stream, keeping it smooth and full, and preserving it from being interrupted by the end of said nozzle-tip.

What I claim as new, and desire to secure by Letters Patent, is—

1. The nozzle-tip *a*, provided with the enlarged mouth a^2, having outwardly-inclined sides *c c*, which are a continuation of the bore of said tip, substantially as described, and for the purpose set forth.

2. The combination of nozzle A, having partition A^2, with leather disk B, casing C, disk D, and clamping screw-bolt E, the above described disks and partitions being provided with oblong registering-openings, arranged substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HARRY HUNT.

Witnesses:
J. R. JONES,
J. C. FARNHAM.