

J. M. de Bolle,
Hose-Nozzle Cock,
No 37,680, Patented Feb. 17, 1863.

Fig. 1

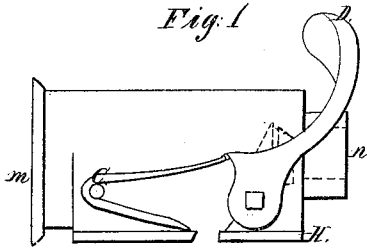


Fig. 2

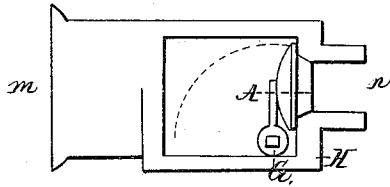


Fig. 3

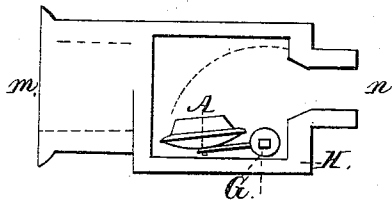


Fig. 4

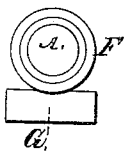


Fig. 5



Fig. 6



Witnesses:

Wm. L. Ernst
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Inventor

John M. de Bolle

UNITED STATES PATENT OFFICE.

JOHN M. DE BOLLE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN VALVES FOR HOSE-NOZZLES.

Specification forming part of Letters Patent No. 37,680, dated February 17, 1863.

To all whom it may concern:

Be it known that I, JOHN M. DE BOLLE, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Valves for Hose-Pipes; 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 accompanying drawings, making part of this specification, in which—

Figure 1 is a side view, and Figs. 2 and 3 longitudinal sections of a hose-pipe for pavement-washing having my improvement applied thereto; and Figs. 4, 5, and 6 face, back, and side views, respectively, of the valve attached to its carrier, like letters indicating the same parts when in the different figures.

Letters Patent were granted to me dated the 28th day of May, 1861, for a certain "improvement in valves for hose-pipes;" and the present invention relates to a peculiar mode of constructing and applying the valve of such a pipe so as to better prevent accidental leaking when the valve is closed upon its seat, without obstructing the free passage of water through the pipe when the valve is open.

It consists in the application, substantially in the manner hereinafter described and set forth, to hose-pipes of a conically-faced disk-valve having a flange, and also a flat packing-ring of thin gum-elastic fabric secured against the said flange by means of a groove around between the same and the conical or beveled face of the disk, so that the said ring of gum-elastic and the said valve-faces shall together operate to produce a perfectly water-tight joint in the same when closed.

In the drawings, A is the valve-disk; C, its conical face; F, its flange, and E its thin ring of gum elastic between the said face and flange.

H is a shoulder in the pipe, which affords the fixed seat for the valve A, and also causes ample room in the inside of the pipe for the motion of the valve and its carrier and for the passage of the water through the pipe when the valve is open.

G is the carrier, which is attached to the back of the disk A, and also to the usual thumb-lever, D; and C is the usual spring

which aids in closing the valve when the operator's thumb or finger releases the lever D. The valve-disk A has its edge or face beveled and ground accurately to fit in a correspondingly-beveled seat in the shoulder H of the pipe, and has also its flange F, which projects around its rear edge, made to be at the same time almost in contact with the flat face of the shoulder H of the valve-seat, a narrow groove being made around between the said flange F and the beveled edge or face C, for the purpose of receiving the inner edge of the thin packing-ring E of gum-elastic fabric, so that it will be securely retained in its place against the face of the flange F, and thus produce a thin packing between the flange and the seat of the valve A when the latter is closed, as seen in Fig. 2.

In the operation of this valve, when the lever D is pressed backward, and the valve consequently opened, as seen in Fig. 3, the water passes freely from *m* to *n'*; but when the said lever is released from the operator's thumb or finger, the spring C, in connection with the pressure of the water, causes the valve-disk A to close down upon its seat and compress the gum ring E between the flange and the flat face of the seat until the beveled faces of the valve and seat come into contact; but should the faces of the valve and its seat not be accurately fitted together, or should any fine grains of sand accidentally be caught between them, the gum ring E will compensate for the obstruction or defect, and thus insure the tightness required in the valve.

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

The application to hose-pipes of the valve-disk A, the same consisting of the conical or beveled edge C, the flange F, and the thin gum-elastic ring E, constructed and arranged in relation to each other as set forth, and operated together by means of the carrier G on the lever D, as and for the purpose specified.

JOHN M. DE BOLLE.

Witnesses:

BENJ. MORSON,
JAMES MCCALUN.