W. James,

Hydrant.

No 25,969. Patented Nov. 1, 1859.

Fig. 1.

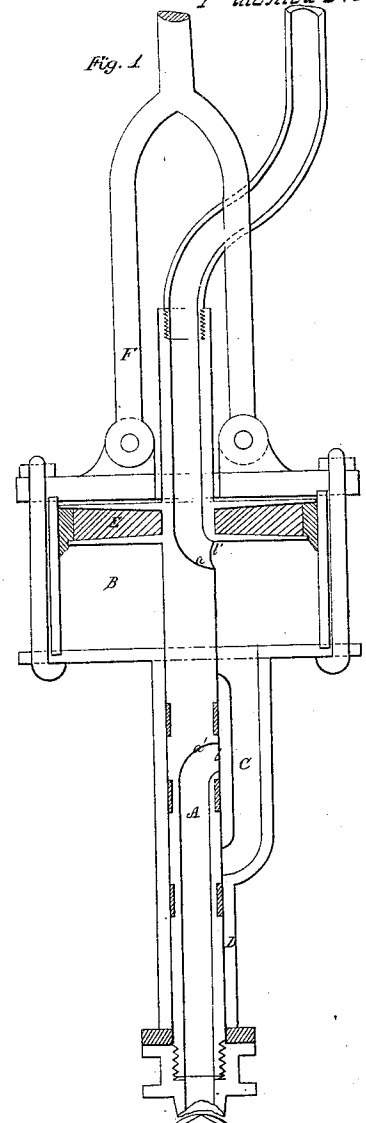
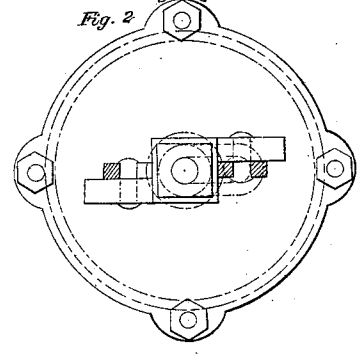


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM IAMS, OF BALTIMORE, MARYLAND.

HYDRANT.

Specification of Letters Patent No. 25,969, dated November 1, 1859.

To all whom it may concern:

Be it known that I, WM. IAMS, of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in the Construction of Hydrants; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 represents a vertical section of a hydrant constructed on my improved plan, and Fig. 2 a top view of the same.

The nature of my improvement consists in a certain new arrangement and combination of devices for regulating the discharge of water, thus presenting a hydrant of very simple construction; not liable to get out of order, as is the case with all the hydrants provided with puppet or other valves, whenever the water is charged with foreign matters which may be deposited in the hydrant and obstruct the valve play; and by which any washing of water is completely avoided and the discharging pipe not liable to be injured or choked by the freezing of water.

To enable others skilled in the art to make, construct and use my improvement I will now proceed to describe it in detail.

In the accompanying drawing A represents the main pipe of the hydrant, which is to be secured to a branch pipe in any suitable manner. This pipe is divided by two partitions (*a* and *a'*); and provided with two openings at its side; one (*b*) below the lower partition and (*b'*) above the upper partition.

B is a valve box, which is arranged to fit closely to the pipe A and to the piston E, which is rigidly secured to the pipe A somewhat above the opening (*b'*). To the lower end of the valve box (B) is secured a sleeve (D) which fits over the pipe (A) in such manner as to allow its being slid up and down. This sleeve is provided with an opening which communicates with a short tube (C) the other end of which opens into the valve box (B).

From the foregoing description it will be perceived that the valve box (B) together with the sleeve (D) and tube (C) may be moved up and down; so that the opening of the tube (C) will either communicate with the opening (*b*) at the lower portion of the supply pipe A, or the supply of water will be cut off—the whole being so arranged that the tube (C) should communicate with the supply pipe when the valve box is raised up, that is to say, when the piston (E) has attained its lowest position. By allowing the valve box to slide down again, the communication with the supply pipe will be interrupted and a vacuum will be formed in the valve box below the piston (E) which will draw all the water from the upper part of the pipe (A) into said valve box (B), so that there will be no danger of any water freezing in the pipe and obstructing the free flow of the water from the supply pipe. When it is desired to operate the hydrant, it is only necessary to raise the valve box (B) by means of handles (F) or any other suitable contrivance: when the piston (F) will force the water contained in the valve box (B) into the discharging pipe; and the tube (C) being brought in communication with the opening (*b*) of the pipe (A) will lead into the valve box (B) a continuous stream of water so long as the valve box is maintained in its elevated position.

I claim—

The movable cylinder (B) and tube (C) when combined with the fixed piston (E) upon the supply pipe (A), and so constructed and arranged in relation to the supply pipe that its elevation shall open a direct communication with the main in the manner and for the purposes specified.

In testimony whereof I have signed my name to this specification.

WILLIAM IAMS.

In the presence of—
CHAS. EVERETT,
LEE MCCOMAS.