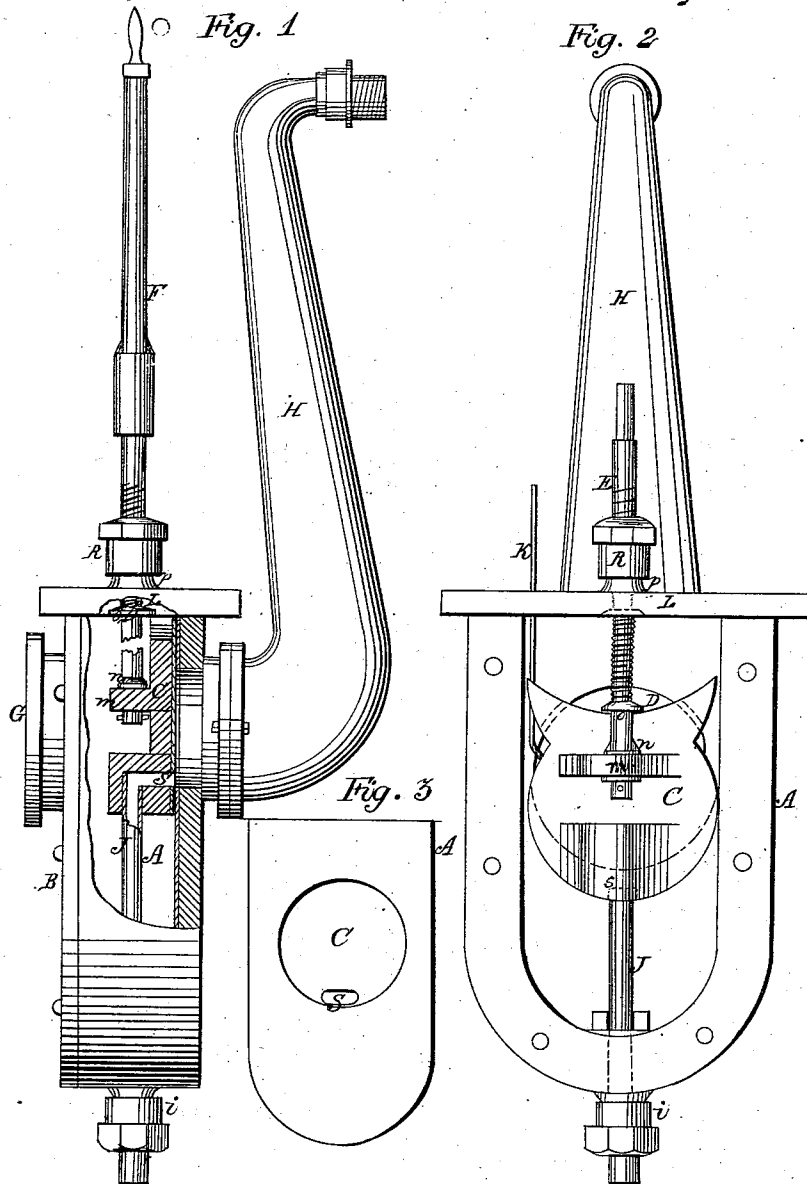


W. Kearney,
Hydrant.

N^o 82,326.

Patented Sep. 22, 1868



Witnesses:
W. C. A. Ketter
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WILLIAM KEARNEY, OF UNION TOWNSHIP, NEW JERSEY.

Letters Patent No. 82,326, dated September 22, 1868.

IMPROVEMENT IN HYDRANTS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM KEARNEY, of Union township, in the county of Bergen, and State of New Jersey, have invented a new and useful Improvement in Hydrants; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in street-hydrants, for the supply of water to fire-engines or other purposes.

And it consists in the manner in which the valve operates on its face, and in the provision made for the discharge of the waste water from the delivery-pipe, and also in providing a gauge or indicator for the valve, and in the general construction and arrangement of parts, as will be hereinafter more fully described.

Figure 1 represents a sectional elevation of the hydrant, showing its general outside appearance.

Figure 2 is a view of the interior, showing the valve, and the method of its operation.

Figure 3 is a detached view of the face of the valve, showing the opening by which the waste water escapes when the valve is closed.

Similar letters of reference indicate corresponding parts.

A is the shell or casing of the hydrant, made of cast iron or any other suitable material, an edge view of which is seen in fig. 1, and a side view in fig. 2, as seen with the side plate off.

B, fig. 1, represents the side plate.

C is the valve, which is a plain-faced disk, which is passed over the orifice D in the shell.

This orifice is for the entrance of the water to the discharge-pipe by operating a screw-stem, E, with a wrench, F, or key, or by any other suitable device.

The pipe from the water-main is connected with the side plate B at G, as seen in the drawing.

H is the discharge-pipe, which connects the orifice D, and extends upward like a goose-neck, the upper end of which has a screw-thread upon it for attaching hose.

J is the waste-pipe, which is attached to the lower side of the valve, and moves down with it through the stuffing-box i.

K is a gauge-rod or indicator, which is attached to the valve, and which passes up through the cap L of the hydrant, as seen.

By this rod the position of the valve on its seat may be ascertained with precision, when the hydrant is below the surface of the ground.

The valve-stem E is attached to the back of the valve, as seen at m, where it is confined by collar n on one side, and by a washer and pin on the other.

In this position the stem turns as in a box.

o is a collar on the stem to prevent the water from escaping or passing around the screw-thread, when the valve is closed.

The screw of the stem works in a neck or projection, p, on the cap L, in which a screw-thread is cut for the screw on the valve-stem.

R is a stuffing-box on p, around the valve-stem.

It will be seen that by revolving the stem, the valve will be moved up or down over the orifice D, and water will be admitted to (or shut off from) the discharge-pipe H.

The orifice D is a circle, and the valve is a circular disk, a little larger in diameter, but with horns attached to its upper edge, which act as guides against the case, as seen in the drawing.

On the face of the valve, at its lower edge, as seen in fig. 3, there is a cavity marked S.

When the valve is raised sufficiently to close the orifice D and shut off the water, this cavity S, on the face of the valve, opens a communication between the discharge-pipe H and the waste-pipe J, so that the water contained in the discharge-pipe drains off through the waste-pipe, and freezing is thereby prevented.

This hydrant may be buried in the earth to a sufficient depth to prevent freezing around the valve.

The rod K will extend up above the surface, so as to indicate the position of the valve, when the hydrant is in that position.

The pressure of the water will keep the valve pressed tightly to its face, so that all leakage is prevented.

All the operating parts of this hydrant are extremely simple, and its many advantages over those more complicated, and more liable to get out of order by freezing or otherwise, will be obvious to all.

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

The arrangement and operation, in the case A, of the sliding disk-valve C, perforated at S, and the sliding waste-pipe J, as herein shown and described.

WILLIAM KEARNEY.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.