J. Allison,

Hydrant,

No. 83,899. Patented Nov. 10, 1868.

Fig: 1.

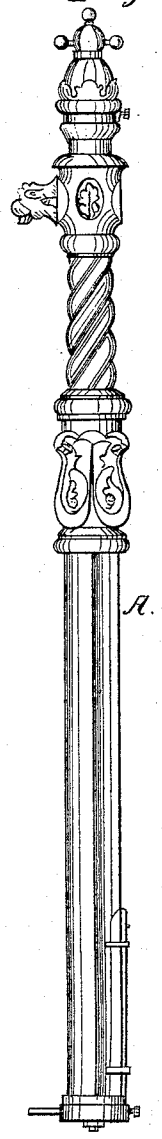


Fig: 5.

Fig: 4.

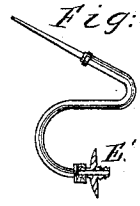


Fig: 6.

Fig: 2.

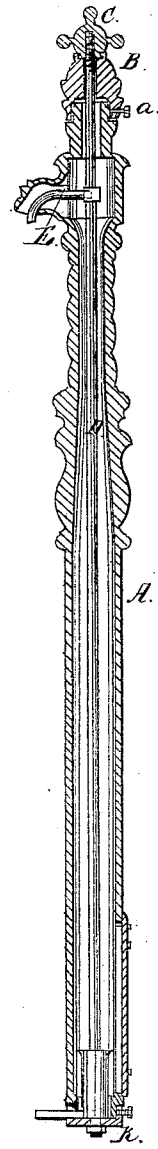
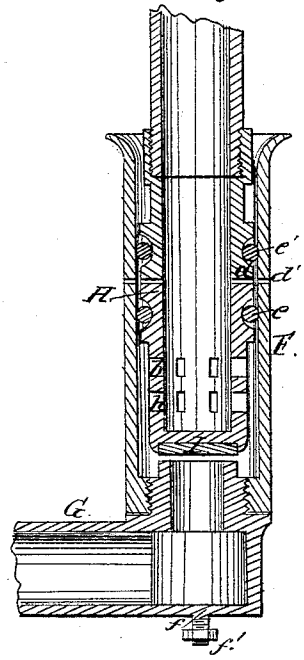


Fig: 3.



Witnesses
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JAMES ALLISON, OF CINCINNATI, OHIO.

Letters Patent No. 83,899, *dated November* 10, 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, JAMES ALLISON, of Cincinnati, in the county of Hamilton, and State of Ohio, 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 hydrants, and it consists in the construction of the lower portion of the discharge-pipe, arranged to operate in connection with the enlarged vertical portion of the water-pipe, as will be hereinafter more fully described.

On reference to the accompanying drawings,

Figure 1 represents an elevation of my improvement, when used as a hydrant;

Figure 2 represents a vertical section of the same;

Figure 3 represents an enlarged vertical section of the part connecting with the water-pipe, showing the arrangement of the valves;

Figure 4, a hose, with plug for connection when used for washing streets, or as a fire-plug, shown in red;

Figure 5, a detachable cap, to be substituted when it is also to be used as a hitching-post; and

Figure 6, a view of a plate provided with a hitching-ring, to be attached to the post also, when used as a hitching-post.

Similar letters of reference indicate corresponding parts.

A represents a hollow post, which is set into the ground, in the usual manner, for protecting the water-pipe, which is provided at the top with a detachable cap, B, having a socket, which sets over the top of the post A, and is provided with an annular groove, into which a corresponding ridge on the post may be drawn on one side by the set-screw, when it is screwed up, whereby the cap is permanently secured with one or more set-screws.

D represents the vertical water-pipe, to which the spouts E or plugs E′ are connected by a detachable connection, whereby one may be readily substituted for another.

F represents a vertical extension of the water-pipe G, attached to the latter by a screwed joint; and

H represents the lower portion of the vertical pipe, which is provided at its lower end with a yielding disk of rubber, which serves as a valve for opening or closing the passage of the water from pipe G, and is operated by the nut C on the top of the shaft, which is connected to the upper end of the pipe D by a screwed connection, whereby the pipe D may be raised or lowered to open or close the passage for the water.

The water enters the vertical pipe D through the openings *b*.

d and *d′* represent waste-passages, and

e and *e′*, rubber-packing rings.

The ring *e* is intended to prevent the passage of the water from below out at the waste-passages, and to be raised up when the pipe D is raised to open the passage at I, so as to close against the waste-passage, to prevent the water from flowing out thereat while it is being drawn out at the spout.

The ring *e′* is intended to stop the passage of the waste water upward.

K represents a cap, secured to the lower end of the post A, in a manner similar to the cap, B, at the top.

A stud, *f*, on the bottom of the water-pipe G, passes through the said cap, and is secured to it, as shown by a nut, *f′*

When it is desired to use my improved apparatus as a hydrant, the curved spout E is applied, as shown in fig. 2, and when it is to be used for washing the streets, or in cases of fire, the hose-pipe, as shown in fig. 4, may be substituted, and when it is desired to convert the post into a hitching-post, the horse-head cap, fig. 5, may be substituted for the cap, B, and a nut, C′, may be applied to the head for working the valve, and made in a form similar to the nut C, or it may be provided with a small square projection to be turned with a wrench, and the ring-plates, fig. 6, may be attached, in place of the ornamental figures, on the plain surfaces near the spout.

By means of the above-described arrangement of hydrants, the several enumerated purposes may all be subserved by the same device, with but slight modifications; as, for instance, in the general use of them, some are required for hydrants to be set in the street, when it is also desirable to make use of them for hitching-posts, and for washing the streets, while others may be required to be set in a wash-room, or in a yard where they are only required as hydrants.

Therefore, in the manufacture of them, the several parts may be promiscuously made, and put together as required.

Moreover, as an improvement in fire-plugs over the now common arrangement of fire-plugs, my arrangement possesses peculiar advantages. As the former are set into the walk, generally in recesses, they are more liable to get out of order, and to be entirely covered and frozen up in cold weather, whereas, according to my improvement, they are not exposed to such difficulties.

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

The hollow perforated pipe H, provided with the elastic disk I, waste-passage *d*, and elastic packing-rings *e e′*, arranged to operate in connection with the cylinder F, having the waste-passage *d*, as herein described, for the purpose specified.

JAMES ALLISON.

Witnesses:

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