

J. P. GALLAGHER.

HYDRANT.

No. 172,110.

Patented Jan. 11, 1876.

FIG. 1.

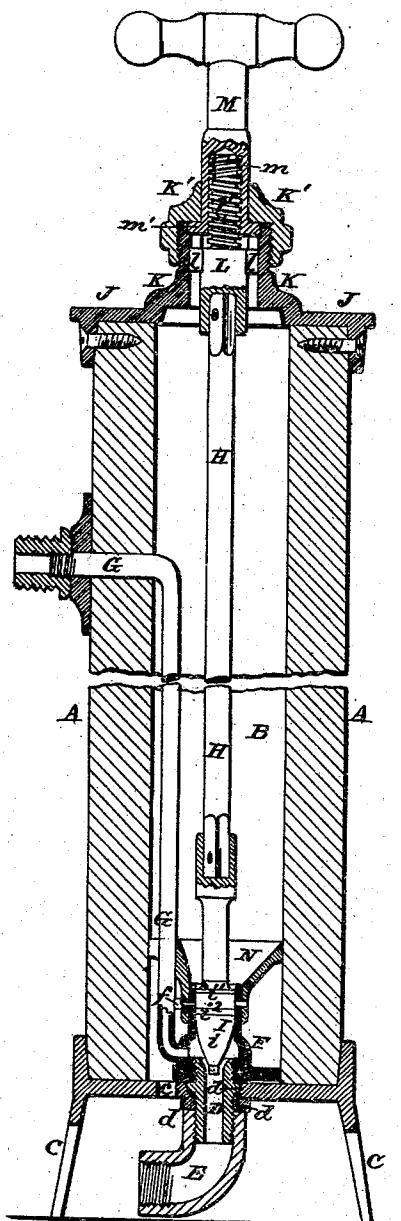
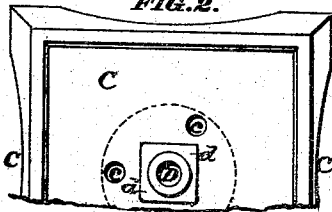


FIG. 2.



ATTEST:

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UNITED STATES PATENT OFFICE.

JOSEPH P. GALLAGHER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. **172,110**, dated January 11, 1876; application filed November 29, 1875.

To all whom it may concern:

Be it known that I, JOSEPH P. GALLAGHER, of the city and county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Hydrants, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

This invention consists in a casing for the hydrant, formed of a solid piece of timber, in combination with a perforated metal support or base, the casing having a central bore for the reception of the valve, water-pipe, and valve-operating device.

On the top of the valve-rod a sliding screw-head is arranged, which moves in a sleeve-nut formed in the lower portion of the operating-handle. The said screw-head is provided with side lugs, which move in vertical grooves in the housing or packing-box. The handle has a collar that prevents its vertical movement, and said collar may be packed, or have a ground joint, to prevent the passage of water.

Figure 1 represents a vertical section of my invention. Fig. 2 is a plan of the perforated base.

A is the casing of the hydrant or street-washer, formed of a solid piece of wood, and having a central bore, B, in which are arranged the valve, water-pipe, &c., of the hydrant. This casing is supported at bottom on the perforated metal base C, the perforations *c* of which allow the water to pass out of the bore B. To the base C the adjustable valve-seat D is secured by its squared portion *d*, and by the lock-nut *d'*, and to the lower end of this seat D an adjustable elbow, E, is screwed, which may be turned in any direction required in order to meet the supply-pipe.

The purpose of constructing the seat with a square or angular portion, *d*, is to hold it from turning, and thus prevent the thread from being stripped from the valve-case in cases where the elbow E is required to be forcibly turned, so as to bring it to its proper position for attachment of the supply-pipe.

On the top of this valve-seat D the valve-chamber F is secured. This valve-chamber is similar in construction to that of my former patent, No. 114,283, dated May 2, 1871, having the overflow-passage *f* for the escape of

water from the water-pipe G. The valve I is secured to the bottom of the stem H, and is composed of a conical leather point, *i*, and a cylindrical part, *i'*, arranged on either side of a nut, *i''*, and so arranged that the point *i* can be removed independently of the part *i'*; also, as the part *i'* becomes worn it can be spread by tightening the nut *i''*, thus contracting it vertically. On top of the casing A is a cap, J, of which the housing or stuffing-box K may form a part, or be made separate and bolted in place. The box K has vertical guide-grooves for the wings *l* of the sliding head L, which is provided with a screw-shank, *l'*, that screws into a sleeve-nut, *m*, formed at the lower end of the handle M. The handle M is provided with a collar, *m'*, which is secured between the top of the box K and its cap K', so as to prevent any vertical movement of the handle M. N is a cap or cup, preferably of a conical shape, which fills the aperture in the casing, so as to act as a guide for introducing the valve into the valve-chamber after the hydrant has been placed in the ground. This cap may either form part of the valve-case or be made separate and secured in place, as shown.

It will be seen that with the perforated base C a neat joint is formed at the bottom of the case, thereby preventing the entrance of sand or mud into the casing, the perforations being to allow the waste-water to pass from the casing and waste itself in the surrounding earth, and thus overcoming the danger of water freezing in the casing, which would prevent the operation of the hydrant.

The construction of the cap J and housing K are such that when the cap K is removed the valve and valve-rod can be drawn up through the opening in the housing K. Thus the valve may be repaired and returned to place without disturbance of the hydrant or digging around it.

I claim as my invention—

1. The base-casting C, having perforations *c*, substantially as and for the purpose set forth.

2. The casing A, formed of a solid piece of wood, in combination with a perforated metal base, C, substantially as set forth.

3. The adjustable valve-seat D, having squared part *d*, in combination with the lock-

nut *d'* and metal base C, substantially as set forth.

4. The adjustable valve-seat D and lock-nut *d'*, in combination with the valve-chamber F, as set forth.

5. The combination of a guide cap or cup, N, filling the aperture of the casing, or nearly so, with the valve-chamber F, substantially as set forth.

6. The valve I, composed of leather disks *i*¹, secured, by screw-collar *i*², independently of the conical valve part *i*, as and for the purpose set forth.

7. The cap J and housing or stuffing-box K, having vertical guide-grooves for the wings *l*, in combination with the sliding head L, screw-shank *l'*, and handle M, having a sleeve-nut, *m*, at its lower end, substantially as and for the purpose set forth.

JOSEPH P. GALLAGHER.

Witnesses:

SAML. KNIGHT,
ROBERT BURNS.