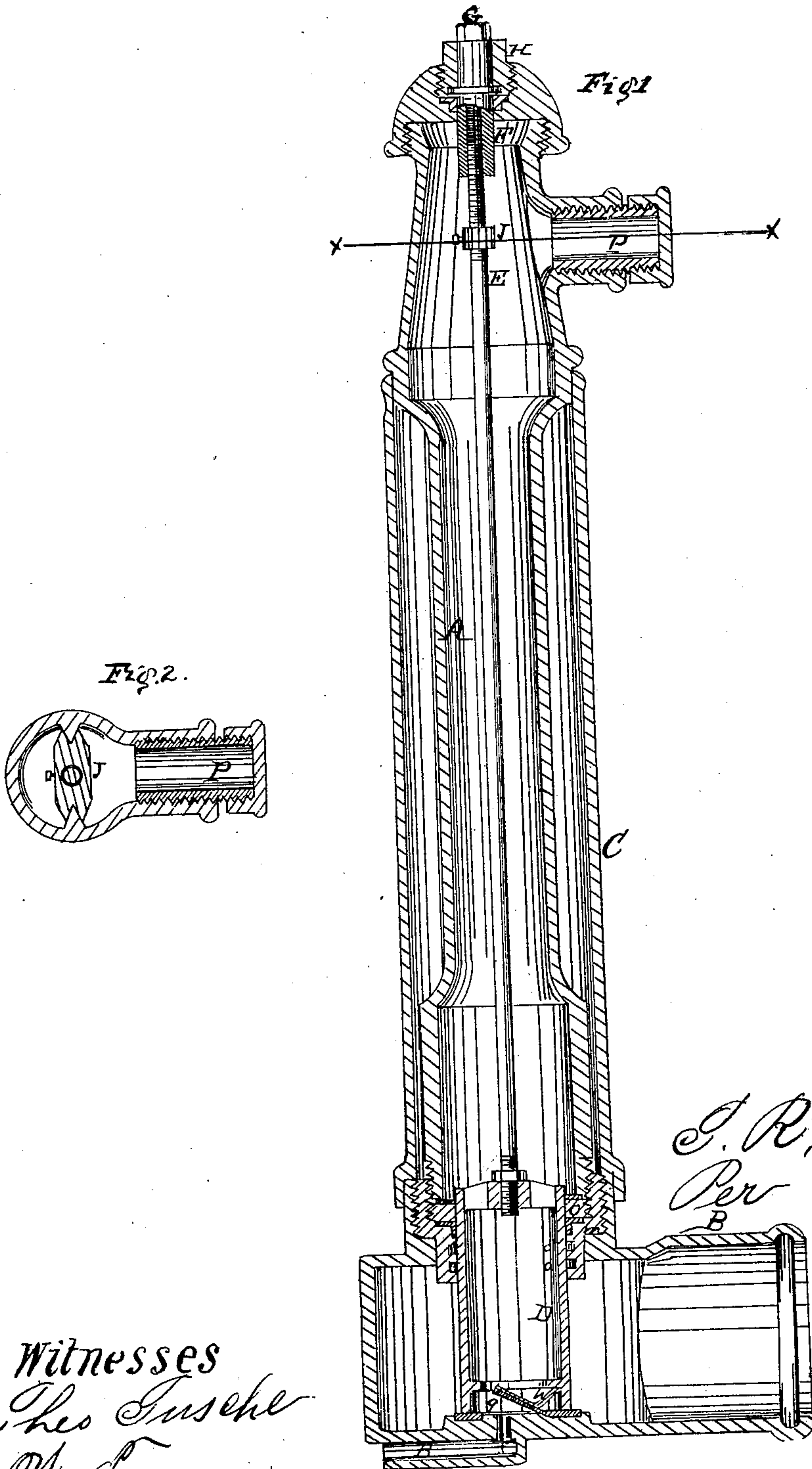


T. R. BAILEY, Jr.
HYDRANT.

No. 75,344.

Patented Mar. 10, 1868.



Witnesses
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T. R. BAILEY, JR., OF LOCKPORT, NEW YORK.

Letters Patent No. 75,344, dated March 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, T. R. BAILEY, Jr., of Lockport, in the county of Niagara, and State of New York, have invented a new and improved Hydrant Fire-Plug; 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 a new and improved method of constructing fire-plugs or hydrants; and the invention consists in operating a cylinder-valve in a suitable case, and in the arrangement and combination of parts connected therewith, as hereinafter described.

Figure 1 represents a longitudinal central section of the hydrant, showing the parts of which it is composed, and the manner of their arrangement.

Figure 2 is a cross-section of fig. 1, through the line *z z*.

Similar letters of reference indicate corresponding parts.

A represents the hydrant-tube, from which the water is discharged. B is the horizontal section, which is connected with the water "main," and which forms the valve-chamber. C is a loose casing around the hydrant-tube, for protecting the tube from dirt, &c. D is the cylinder-valve, which has its seat at its lower end, on elastic or leather packing, secured in a groove, as seen in the drawing at *a*. E is a rod, having a screw-thread on its upper end, by which the valve is operated. F is a sleeve-nut, which engages with the screw on the rod, raising and lowering it as the nut is turned. This nut is turned by a wrench on the head G. The sleeve-nut is secured in the cap of the hydrant by a collar and packing under the hollow-cylinder stuffing-box H, as seen in the drawing. J is a yoke, which is attached to the rod E by a set-screw, and which is secured in the tube A, and prevented from turning, as it moves up and down, by projecting lugs, as seen in fig. 2; and it will be seen that the arrangement is such that the rod and valve may be raised and lowered without being rotated. This secures a uniform and perfect bearing of the valve on its seat, the packing *a* remaining undisturbed.

Provision is made for the discharge of the waste-water by an orifice beneath the valve D, marked *f*, which orifice is opened and closed by a valve marked *g*, as seen in the drawing. *h* is a wing on the top of this valve.

As the cylinder-valve D descends, the annular flange *i* on its inside strikes the wing *h*, and raises the valve, as seen in the drawing, thus allowing any water which may remain in the hydrant to escape through the orifice *f* and aperture *k*.

It will thus be seen that no water will be left in the hydrant to freeze in cold weather.

The tube A is secured to the horizontal section B by a ring-nut, *m*, which contains recesses for packing-rings around the valve, as seen at *n n*. Packing around the valve is also secured by another ring-nut, *o*, and also under the end of the tube A, as seen in the drawing.

P represents the discharge-pipe, with a screw for the attachment of the hose, and a cap-piece for covering the pipe when the hydrant is not in use.

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

1. A hydrant or water-plug, constructed substantially as shown and described, that is to say, with the parts A and B connected together as shown, and with a cylinder-valve and a waste-water valve connected and operated in combination, substantially as herein specified.

2. The arrangement of the parts A B, valve D, case C, and stuffing-box H, as herein described, for the purpose specified.

T. R. BAILEY, JR.

Witnesses:

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