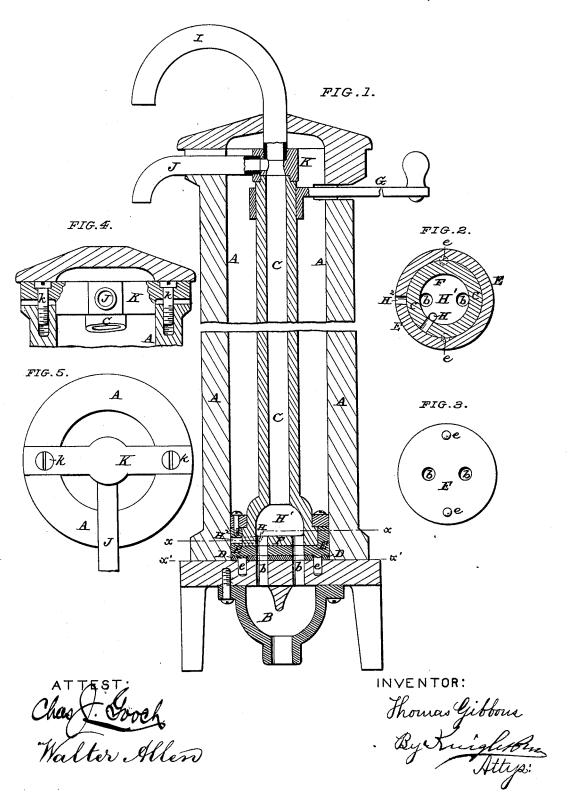
T. GIBBONS. Hydrant.

No. 220,280.

Patented Oct. 7, 1879.



UNITED STATES PATENT OFFICE.

THOMAS GIBBONS, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. 220,280, dated October 7, 1879; application filed August 28, 1879.

To all whom it may concern:

Be it known that I, THOMAS GIBBONS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Hydrants, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention consists, first, in the manner of constructing the valve in a hydrant having one passage for conveying the water instead of the pipe and stem, as is usual; and, second, in the manner of holding the valve down tight upon its seat, which is done by means of a cross-piece resting centrally upon the water pipe or tube, and being vertically adjustable and connected to the hydrant-frame, all of which will more fully appear hereinafter.

In the drawings, Figure 1 is a vertical section illustrating my invention. Fig. 2 is a horizontal section through the valve and housing at line x x. Fig. 3 is an inverted plan at line x' x' of the valve-housing. Fig. 4 is a detail vertical section at right angles to Fig. 1. Fig. 5 is a top view with cap removed.

A is the hydrant-frame, which may be of any construction and of any suitable material. To the under side of this is attached a cup, B, into which the water enters from the street-main.

 $b\ b$ are openings for the passage of the water into the chamber H^1 (which communicates with the pipe or tube C) when the valve is opened. Of these openings b, there may be one or more, as desired. I have shown two.

D is a rubber packing between the valvehousing E and the bottom of the hydrant-casing, for the purpose of insuring a water-tight fit. ee are pins or lugs extending from the under side of the valve-housing downward into the frame or casing. These are to hold the housing from moving with the oscillation of the valve F. The valve is operated by means of the handle G, attached to the pipe or tube C.

H is an outlet for the water from the valvechamber H¹, which, when the valve is closed, communicates with the opening H² in the valvehousing, to allow the water to escape from the hydrant, and thus avoid all danger of freezing in cold weather.

The water passing through the hydrant may escape through the spout or opening I or J, whichever may be preferred, the other being closed by a cap, plug, or any suitable means.

K is a cross-piece resting centrally on the pipe or tube C, said cross-piece being vertically adjustable and attached to the hydrant-casing A by means of set-screws k, so that the valve and packing may at all times be kept water-tight by tightening the screws.

I claim as my invention—

1. The combination of pipe C, valve F, housing E, pins or lugs e, opening or openings b, and cup B, all substantially as and for the purpose set forth.

2. The combination of pipe or tube C, valve F, housing E, pins or lugs e, packing D, opening or openings b, and cup B, substantially as set forth.

3. The combination, with the tube C, valve F, housing E, pius or lugs e, packing D, opening or openings b, and cup B, of the vertically adjustable cross-piece K, all arranged substantially as set forth.

4. The combination of the vertically-adjustable cross-piece K, pipe or tube C, handle G, chamber H, valve F, housing E, pins e, packing D, opening or openings b, and cup B, all inclosed in the casing A, substantially as set forth.

In testimony whereof I have hereunto set my hand this 21st day of August, A. D. 1879.

THOS. GIBBONS.

Witnesses:

GEO. H. KNIGHT, CHAS. J. GOOCH.