

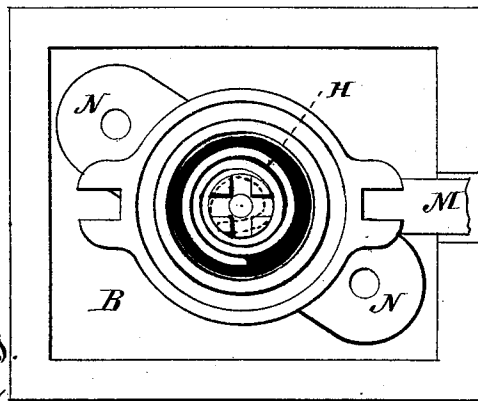
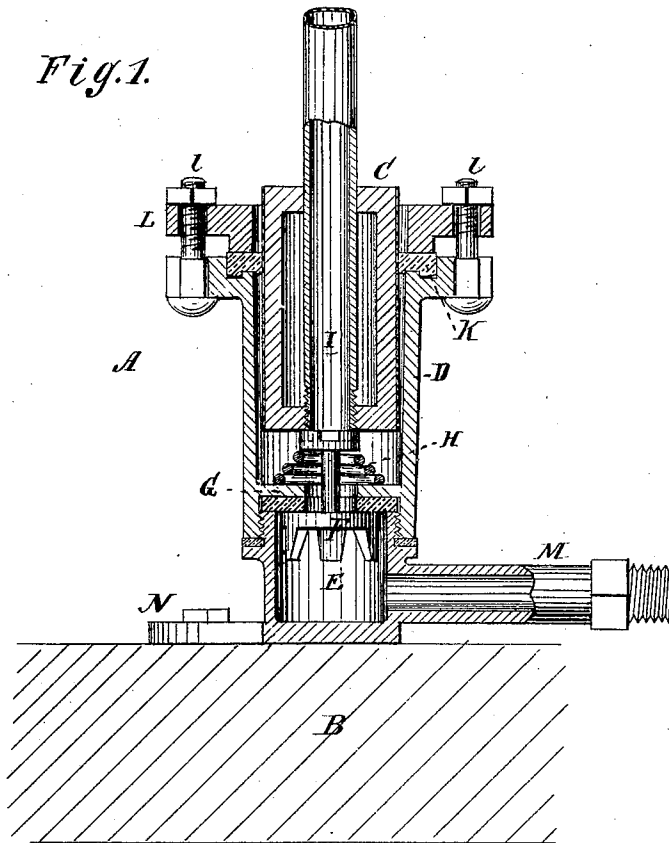
J. W. MURPHY.

Hydrants.

No. 130,233.

Patented Aug. 6, 1872.

Fig. 1.



Witnesses:
G. M. Atkins.
Thos. S. S. Curran

Inventor:
John W. Murphy
PER
R. B. [Signature]
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN W. MURPHY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. 130,233, dated August 6, 1872.

Specification describing an Improved Hydrant, invented by JOHN W. MURPHY, of Baltimore, in the county of Baltimore and State of Maryland.

The invention consists in connecting, with a water-tight plunger, a central water-conveying pipe and a valve, so that the same movement which unseats the valve also allows the water to pass directly up, as hereinafter described. Second, the invention consists in placing the end-perforated flange, by which the hydrant is firmly held in its box, diagonally across the bottom thereof, so as to prevent splitting said bottom.

In the drawing, Figure 1 is a central vertical section. Fig. 2 is a top view with the cap taken off.

A represents the hydrant, B the box thereof; C, the plunger; D, the cylinder; E, the chamber that receives water from main; F, the valve; *f*, a grooved cap connected by stem *b* to the valve F; G, the valve-seat; and H, the valve-closing spring. I is a side-slotted converging tube in center of plunger, through which passes the water, and from which it is discharged. This is fast to and moves with the plunger C. K is a rubber packing inserted between the cylinder D and an adjustable cap, L, which is clamped thereto by screws *l*. M is the pipe which connects the chamber E with the water supply or main. The plunger C is a hollow cast-iron cylinder, into which the tube I is screwed. The wear upon it, as well as that upon the packing K, is taken up by clamping down the screws *l l* more tightly.

This packing will thus last a long time. N is the flange on bottom of hydrant, by which it is fastened in its box B. This is provided with screw-holes *n n*. It will be observed that the flange is arranged diagonally across the bottom, and not in line with pipe M, whereby the screws are not inserted in the same line of the grain of the wood and will not split the box.

The operation is as follows: The water from main comes through pipe M into chamber E, and, when the plunger C is pressed down so as to unseat valve F, rushes up into cylinder D, thence through tube I, and finally through the outlet. As soon as the pressure is removed from plunger the spring H seats the valve and restrains the flow of water.

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

1. The spring-retracted plunger C having central discharge-tube I, the valve F, stem *b*, and grooved cap *f*, in combination with the cylinder D G, all constructed and operating in the manner and for the purpose specified.

2. The end-perforated flange N arranged diagonally across bottom of its box B, as and for the purpose described.

To the above specification of my invention I have signed my hand this 27th day of May, A. D. 1872.

J. W. MURPHY.

Witnesses:

SOLON C. KEMON,
THOS. D. D. OURAND.