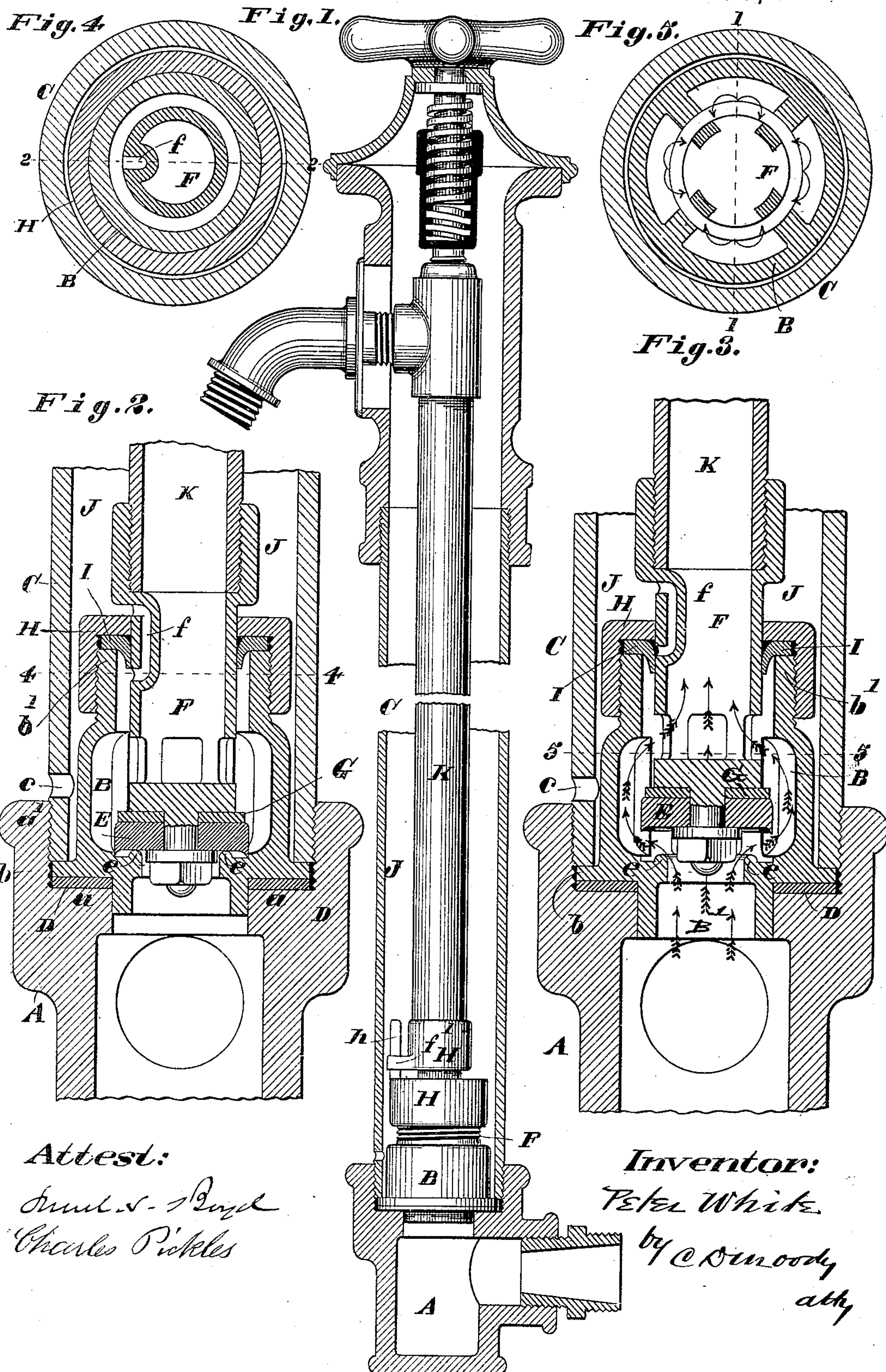


P. WHITE.
HYDRANT.

Patented Jan. 9, 1883.



UNITED STATES PATENT OFFICE.

PETER WHITE, OF ST. LOUIS, MISSOURI.

HYDRANT.

SPECIFICATION forming part of Letters Patent No. 270,354, dated January 9, 1883.

Application filed April 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, PETER WHITE, of St. Louis, Missouri, have made a new and useful Improvement in Hydrants, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a vertical section of the improved hydrant; Fig. 2, a vertical section taken on the line 2 2 of Fig. 4; Fig. 3, a section similar to that of Fig. 2, but showing the valve lifted; Fig. 4, a horizontal section taken on the line 4 4 of Fig. 2; and Fig. 5, a horizontal section taken on the line 5 5 of Fig. 3.

The same letters denote the same parts.

The present improvement relates to the means for controlling the waste from the hydrant, to the mode of connecting the housing, valve-chamber, and valve-foot, and to the means for enabling the valve to be lifted properly out of the valve chamber.

A represents what may be termed the "valve-foot." It supports the valve and parts immediately therewith connected and the housing of the hydrant, the valve-chamber B being seated at *a* in the foot, and the housing C being screwed at *a'* into the foot. A packing, D, is interposed between the valve-chamber and the seat *a*, and the valve-chamber is provided with a flange, *b*, upon which the lower end of the housing bears when the latter is screwed down into the foot. This serves to fasten the valve-chamber in the valve-foot.

E represents the valve. It seats at *e*. It is attached to the hollow stem F, a metallic washer, G, being just above the valve.

H represents the cap of the valve-chamber. A cup-leather, I, is interposed between the cap and the top of the wall *b'* of the chamber. It serves to pack the cap, but more particularly for closing the waste-passage *f* when the valve is lifted, and as follows: In the side of the stem F is a passage, *f*, through which the water is wasted from the valve-chamber into the space J between the housing and the valve-chamber—that is, when the valve is seated, as in Fig. 2, the water passes from the interior of the stem F and the chamber B into the passage *f*, thence into the space J, and thence out through the opening *c* in the housing; but when the valve is lifted, as in Fig. 3, the passage *f* comes opposite the cup-leather, and is

thereby closed, preventing waste until the valve is again seated.

The usual discharge-pipe, K, is screwed into the upper end of the stem F. The latter is provided with an arm, *f'*, which, when the stem is turned to unscrew it, comes against an arm, *h*, upon the cap H. This enables the operator to unscrew the cap from the valve-chamber and to lift the valve-stem, valve, and cap from the valve-chamber and out of the housing. Now, the washer G is larger in diameter than the stem F and the opening in the cap H, and, in case the cap is not entirely detached from the valve-chamber, the washer prevents the valve from being withdrawn from the valve-chamber, and thus the operator is enabled to determine whether the cap is detached from the chamber. The water enters through the foot A, and is discharged (past the valve E) through the stem F and pipe K, in the usual manner.

The extension B' of the chamber B serves partly to center the chamber in the foot, but more especially to hinder the water from passing from the interior of the foot to the joint between the chamber and the foot.

I claim—

1. In a hydrant, the combination of the housing C, the cap H, the valve-chamber B, the cup-leather I, and the stem F, having the waste-passage *f*, substantially as described.

2. The combination of the valve-chamber B, the cap H, the leather I, the stem F, having the waste-passage *f*, and the housing C, having the passage *c*, substantially as described.

3. The combination, in a hydrant, of the foot A, the chamber B, having the flange *b*, and the housing C, substantially as described.

4. The combination of the chamber B, the cap H, the stem F, the valve E, and the washer G, as and for the purpose described.

5. The combination, in a hydrant, of the foot A, the chamber B, having the flange *b*, the packing D, and the housing C, substantially as described.

6. The combination, in a hydrant, of the valve-chamber B, having the extension B', and the foot A, substantially as described.

PETER WHITE.

Witnesses:

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