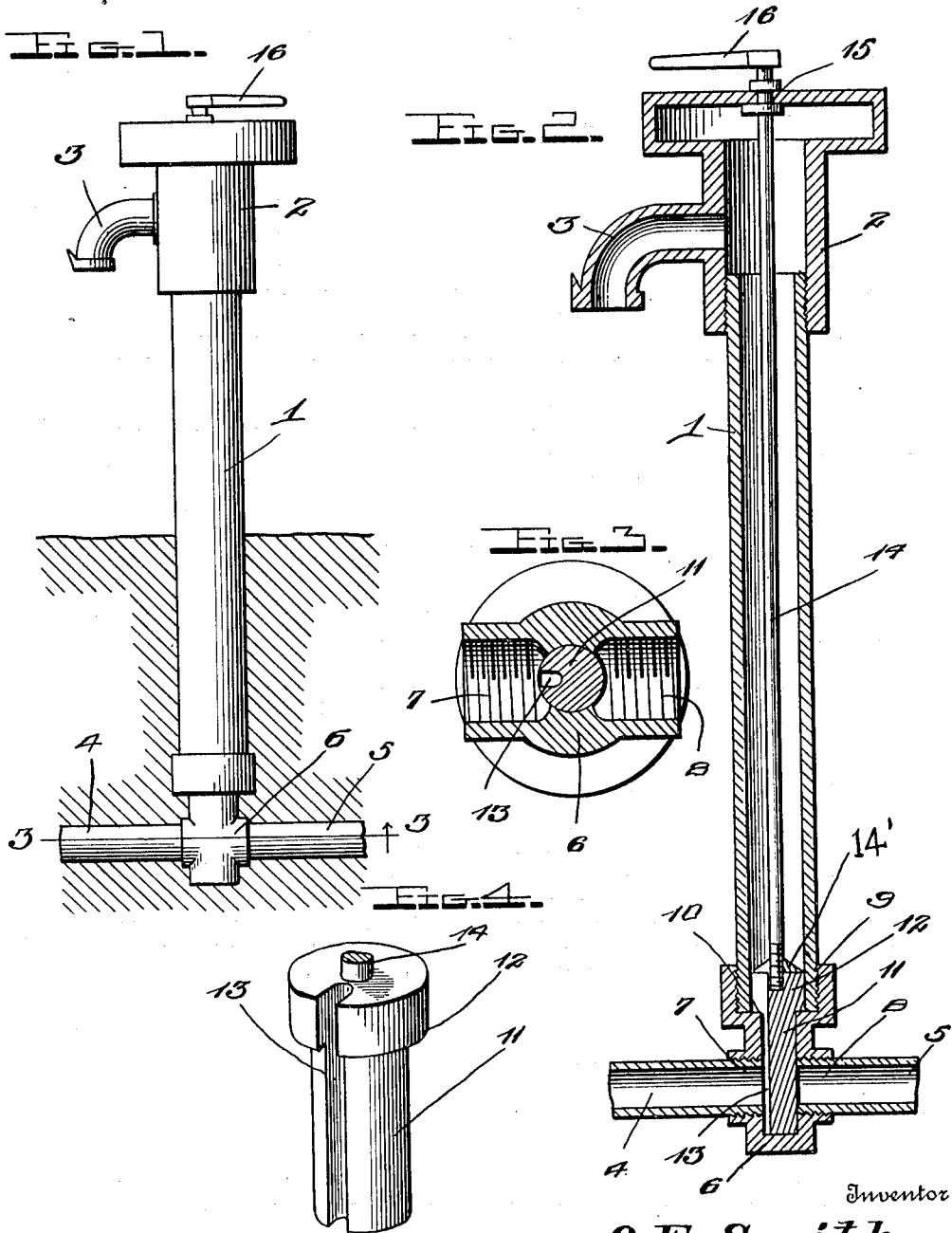


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HYDRANT.
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1,040,447.

Patented Oct. 8, 1912.



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HYDRANT.

1,040,447.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OLLIE F. SMITH, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Hydrants, of which the following is a specification, reference being had to the accompanying drawings.

This invention comprehends certain new and useful improvements in hydrants and relates more particularly to that class of hydrants from which the water may be entirely drained.

The object of the invention is to provide a hydrant of this type which shall be simple in construction, efficient in operation and easily emptied of its water to prevent the same from freezing therein.

This invention also aims to generally improve such hydrants to render them more useful and commercially desirable.

With these and other objects in view, as shall be more fully explained as the description proceeds, the invention consists in certain constructions and arrangements of parts that shall be hereinafter fully described and claimed.

For a complete understanding of the invention reference is to be had to the following description and accompanying drawing, in which—

Figure 1 is a side elevation of my hydrant; Fig. 2 is a detail vertical section of valve and casing; Fig. 3 is a horizontal section on line 3—3 of Fig. 1; and Fig. 4 is a perspective view of the plug-valve and a section of the valve stem, the conical attaching plate being removed.

Similar parts are referred to in the description and designated in the drawing by like reference characters.

Referring to the drawing by numerals, 1 designates the vertical water pipe which extends to a suitable height above the ground and forms the body of the hydrant. The upper end of the pipe is closed by the screw cap 2, having the spout 3, out of which the water flows. The lower end of the hydrant is connected to a supply pipe 4, and a drain pipe 5, through the medium of the valve casing 6.

This casing is cylindrical and is provided with a supply-port 7, a drain-port 8 and a hydrant-port 9, said ports being internally threaded to receive their respective pipes. The ports 7 and 8 are formed in the wall of

the cylindrical casing 6 slightly above its closed, lower end; and the port 9, in which the lower end of the hydrant pipe 1 is secured, is positioned in the upper end of the casing and formed by having this end of said casing open and enlarged. The enlargement provides room for the end of pipe 1 and also forms a valve-seat 10 for the plug-valve 11.

The plug-valve 11 is positioned in the hydrant-port 9 and extends longitudinally of the casing, past ports 7 and 8. It is enlarged at one end to fit within pipe 1 and also to form a shoulder 12 to engage the valve-seat 10. A longitudinal groove 13 extends the full length of the valve providing a passage-way for the water when flowing into or out of the bottom of the hydrant. A valve-stem 14 is threaded into the top of the valve and extends upwardly through the pipe 1 and the cap 2. In order that the valve stem 14 may be firmly secured to the valve 11 I provide a conical attaching plate 14' which is threaded upon the said valve stem and engages tightly against the upper end of the valve. A collar 15 is secured to the valve-stem adjacent the underside of the cap to hold the plug-valve securely seated and also to stop water leaking through the cap. The valve may be turned by means of a handle 16 secured to the end of the valve-stem.

My device operates as follows:—When the groove 13 in the plug-valve is opposite the intake-port 7, water flows through said groove into the pipe 1 and out the spout 3. By turning the valve to bring groove 13 opposite the drain-port 8 the intake is closed and a passage established between the pipe 1 and the drain-port 8 via the groove 13. When it is desired to close the supply-port and leave water in the hydrant the groove 13 is positioned between ports 7 and 8. In order to have the various positions of the valve known to the operator I provide the top of cap 2 with suitable indicating characters.

From the foregoing description in connection with the accompanying drawing it will be seen that I have provided a compact, easily operated hydrant from which the water may be quickly drained if desired.

I claim:

1. In a hydrant, the combination with a body-pipe having a spout carrying cap at one end, of a valve-casing secured to the

other end of said body-pipe, said casing having three ports one of which is enlarged to form a valve-seat, a plug-valve positioned within the enlarged port and extending past
5 the other ports, the plug-valve having a groove extending longitudinally thereof and means for turning said valve.

2. In a hydrant, the combination with a
10 body-pipe having a spout carrying cap positioned on one end, of a cylindrical valve-casing secured to the other end of said body-pipe, having oppositely disposed ports in the wall thereof and a port at one end, which

port is enlarged to form a valve seat, a valve positioned within the enlarged port having
15 an elongated portion extending past the other ports, said valve having a longitudinal groove its entire length and a valve-stem having a crank handle at one end and secured at the other end to the valve. 20

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

OLLIE F. SMITH.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."