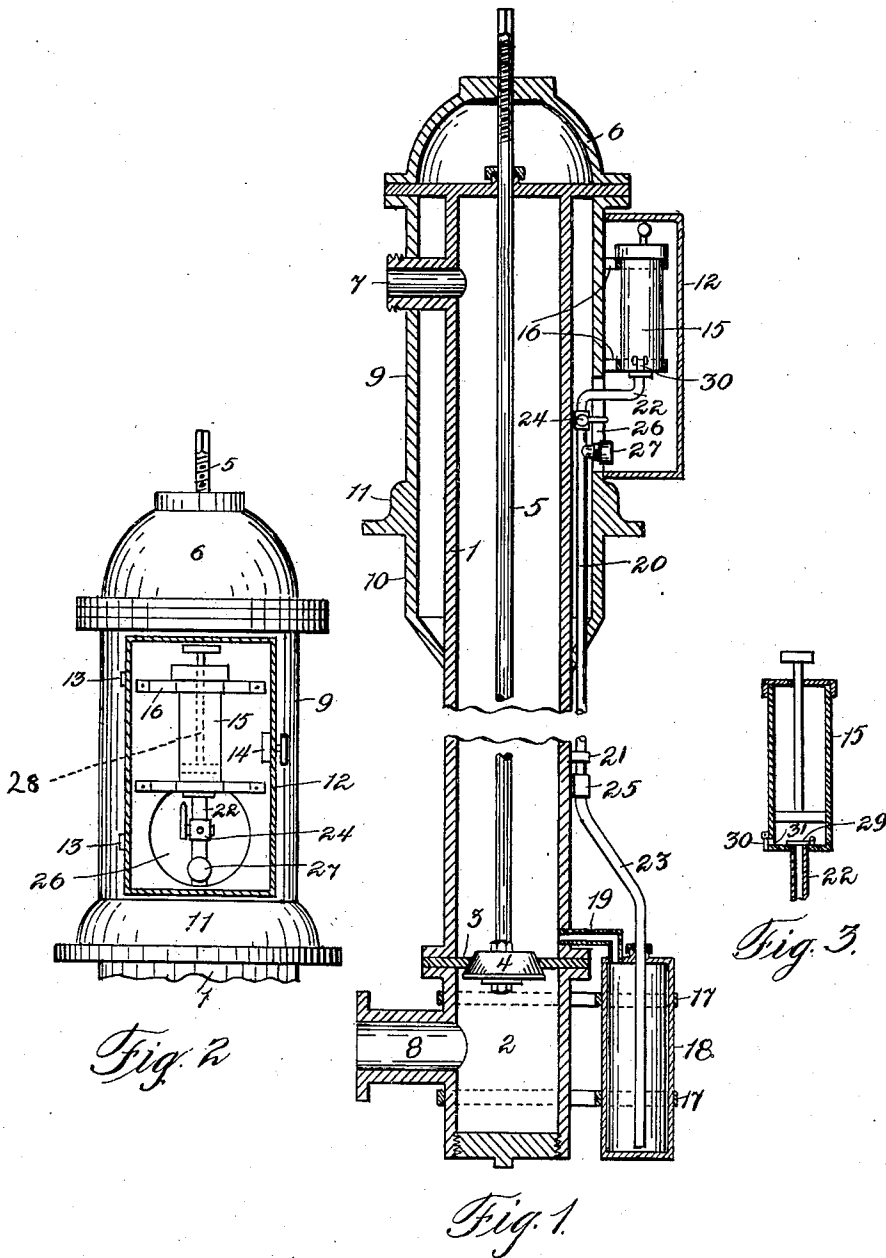


No. 824,770.

PATENTED JULY 3, 1906.

G. J. WILLIAMS.
FIRE HYDRANT DRAIN.
APPLICATION FILED MAR. 17, 1905.



Witnesses

Chas. M. Howell.

Stephen H. Prosser.

Inventor
George J. Williams.
By Walter W. Calmore
Attorney

UNITED STATES PATENT OFFICE.

GEORGE J. WILLIAMS, OF PHILADELPHIA, PENNSYLVANIA.

FIRE-HYDRANT DRAIN.

No. 824,770.

Specification of Letters Patent.

Patented July 3, 1906.

Application filed March 17, 1905. Serial No. 250,531.

To all whom it may concern:

Be it known that I, GEORGE J. WILLIAMS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Hydrant Drains, of which the following is a specification.

My invention relates to certain new and useful improvements in fire-hydrants, and has for its object to provide means for carrying off any waste water accumulated therein after the closing of the valve and, furthermore, in providing means whereby the same may be prevented from freezing through the introduction of steam.

My device for effecting the above consists, broadly, in a receptacle into which the water above the valve drains and from which it is drawn by a suitable means, such as a hand-pump, inclosed in the casing of the hydrant, suitable connection being provided with said receptacle for the introduction of steam from a portable boiler, such as of a fire-engine.

In the drawings forming a part of the specification, and in which like numerals of reference designate corresponding parts throughout the several views, Figure 1 is a vertical section in elevation of my device attached to a hydrant, which latter may be of any of the well-known forms. Fig. 2 is an elevation of the above-ground portion of the hydrant with the pump-box front removed, and Fig. 3 is a detail elevation of the pump.

Reference-numeral 1 designates the barrel of the hydrant, 2 the valve-casing, and 3 the seat for the valve 4, having the usual operating-rod 5 threaded in cap 6. The said barrel is provided with the usual outlets 7, having means for hose connection, and the valve-casing 2 is also provided with the usual inlet 8, which is connected to the supply-main.

Surrounding the barrel of the hydrant is a jacket 9, extending below the surface of the ground, as designated by numeral 10, and having a base 11. This jacket is provided with a casing 12, hinged thereto at 13, Fig. 2, and secured by any suitable means 14, and inclosed by this casing is a hand-pump 15, rigidly secured to the barrel 1 by braces 16 16.

Below the main valve 4 and exterior of the valve-casing 2 is attached a drip-pot or drain-receptacle 18, around which and the valve-casing extends braces or connections 17 17. This receptacle may be of any practical and

desired form to receive, through pipe 19, the water remaining in the barrel 1 after the closing of the valve 4. A pipe 20 is attached to the side of the barrel 1 by one or more braces 21 and at its upper end has connection by pipe 22 with the pump and at its lower end with the drain-receptacle by pipe 23, the former connection being made by drain-cock 24 and the latter by a union 25.

It will be observed that the jacket 9 is cut out, as at 26, to permit the pipe connection 20 to pass therethrough from the pipe 20 to the pump 15, and this opening permits access to the stop drain-cock 24 aforementioned and also to the steam-hose-cap connection 27 of the pipe 20.

The pump 15 is provided with the piston 28 and check-valves 29 and 30, the valve 29 serving as a means for preventing backflow in the pipe 22 and the check 30 permitting the water to escape to the pump-casing and also permitting a suction therein. The said check 30 seats over a discharge-opening 31, formed in the lower portion of the casing. (See Fig. 3.)

The operation of the invention is as follows: In the common type of hydrant upon the closing of the valve the water thereabove having no pressure remains in the barrel, where it is liable in cold weather to freeze; but in this invention the accumulated water drains through the pipe 19 into the receptacle 18, from which it is drawn, through pipe 20, (cock 24 being open,) by the hand-pump 15, accessible by the opening of casing 12. In case any moisture remains in the parts, as through neglect of thorough removal, a steam-pipe from any source, such as a steam fire-engine, is attached to the connection 27, (the valve 24 preferably being closed,) and the steam so admitted forces its way through the pipe, receptacle, barrel, and outlet 7, thawing all frozen parts and permitting immediate use of the hydrant.

It will of course be understood that various changes may be made without departing from the scope and spirit of the invention.

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

1. In combination with a hydrant, of a drain-receptacle therefor, means for removing the contents from said receptacle, and means for passing steam through said receptacle and thence through said hydrant.

2. In combination with a hydrant, of a
 drain-receptacle therefor, a combined steam
 and suction pipe connected with said recep-
 tacle, a pump connected with said pipe, a
 5 steam connection with the pipe, and a valve
 in the pipe intermediate said pump and
 steam connection.

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

GEORGE J. WILLIAMS.

Witnesses:

G. JOHNSON WATKINS,
 RUSSELL T. BOSWELL.