L. M. LANCASTER.

HYDRANT.

APPLICATION FILED MAR. 6, 1909.

930,770. Patented Aug. 10, 1909.

Fig. 1.

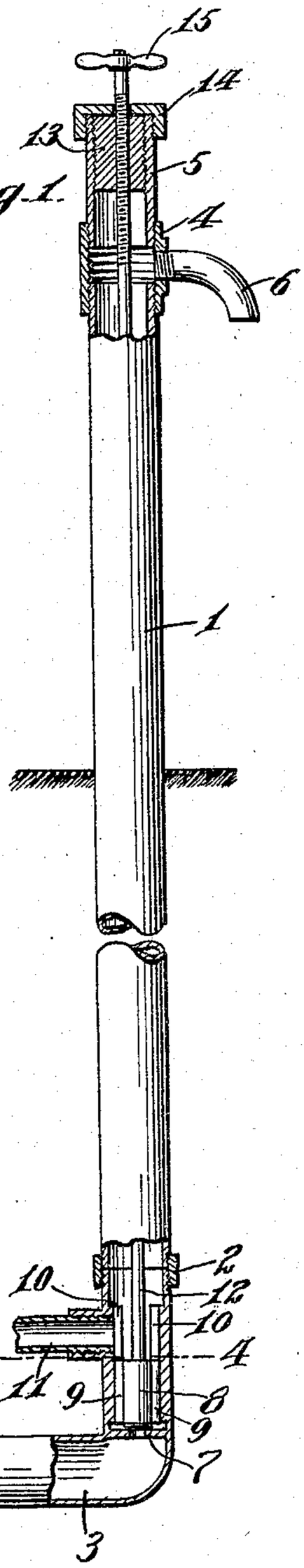


Fig. 2.

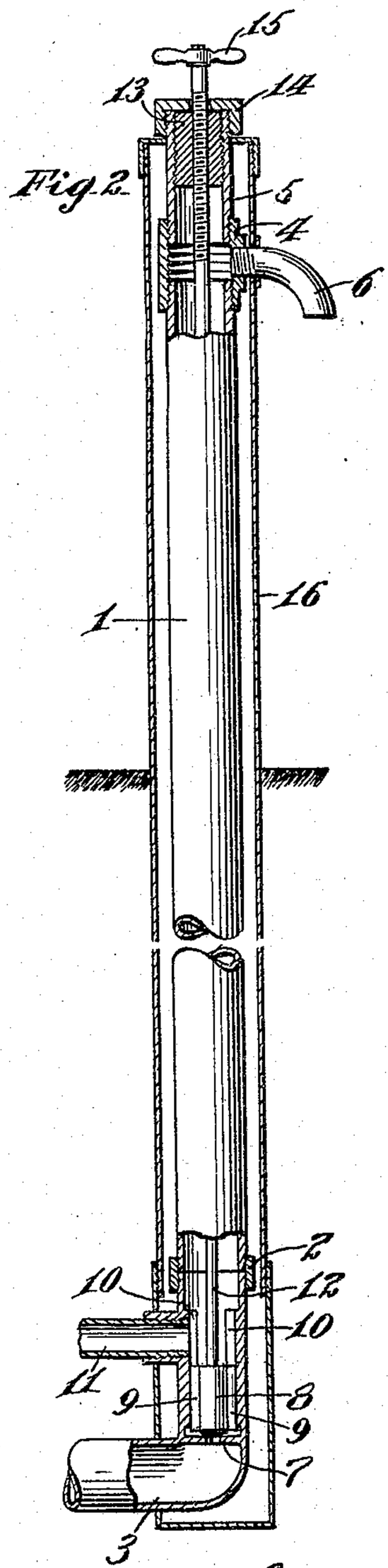


Fig. 3.

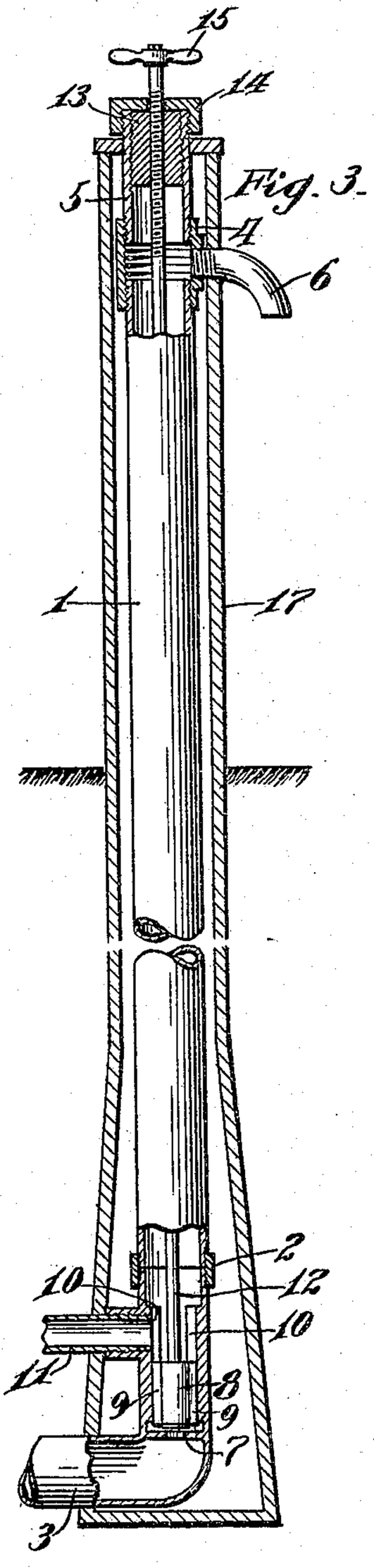
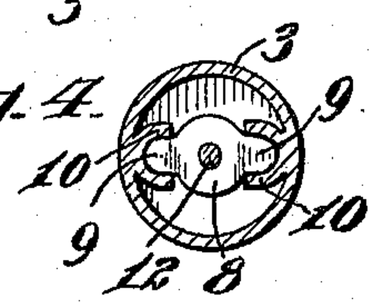


Fig. 4.



Witnesses

Thos. Rosemund.

J. A. L. Muckall.

Inventor

Lewis M. Lancaster,

By Joshua R. H. Potts.

Attorney

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEWIS M. LANCASTER, OF PHILADELPHIA, PENNSYLVANIA.

HYDRANT.

No. 930,770. Specification of Letters Patent. Patented Aug. 10, 1909.

Application filed March 6, 1909. Serial No. 481,616.

To all whom it may concern:

Be it known that I, LEWIS M. LANCASTER, 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 Hydrants, of which the following is a specification.

My invention relates to improvements in hydrants, the object of the invention being to provide a simple, inexpensive construction of barrel with improved valve mechanism for closing the lower portion of the barrel positioned below the ground level far enough to prevent freezing, and for automatically opening an outlet from the barrel to drain the same when the valve is closed, and for closing said outlet when the valve is open.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a broken view partly in elevation, and partly in vertical section illustrating one form of my improvements. Figs. 2 and 3 are similar views showing the application of my improved hydrant in connection with a metal and a wooden casing respectively. Fig. 4, is a view in section on the line 4—4 of Fig. 1.

1 represents the hydrant barrel, which is an ordinary pipe externally screw threaded at its ends, and connected by a coupling 2 at its lower end with the water supply pipe 3. The upper end of barrel 1 is connected by a coupling 4, with an extension 5, and a spout 6 is screwed into said coupling.

A valve seat 7 is provided in the water pipe 3, and is normally closed by a sliding valve 8, which latter is provided at opposite sides with rounded tongues 9, movable in semi-cylindrical guides 10 in the pipe 3, so as to guide the valve in its up and down movement, and direct the same across a drain pipe 11, located above the normal closed position of the valve, so that when the valve is on its seat, the drain pipe will be open to drain the barrel, and when the valve is moved to open position, the drain will be closed, as will be readily understood. This valve 8 is made with a cylindrical bore to receive the valve stem 12, which latter has free rotary movement in the valve, and is screw threaded at its upper end, which threads mesh with internal screw threads in a sleeve or block 13, the latter screwed into the upper end of the barrel extension 5, and inclosed by a cap 14, screwed on to the upper end of the extension.

A knob or hand hold 15 is secured on the upper end of the stem, and by turning the same, the valve 8 can be raised and lowered to regulate the flow of water, and it will be observed, particularly by reference to Fig. 4, that the valve is of appreciably smaller diameter than is the pipe, so that when it is elevated above its seat, water will pass around the sides of the valve and will be permitted a free circulation.

Fig. 2 illustrates my improved hydrant in connection with an ordinary metal casing 16, while Fig. 3 illustrates the device employing an ordinary wooden casing 17. In other respects, the construction is identical with that described in connection with Fig. 1.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the claims.

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

1. In a hydrant, the combination with a barrel, a valve seat, a vertically movable valve in said barrel, a stem secured to said valve and projecting up through the barrel, semi-cylindrical guides, curved tongues on the opposite sides of said valve movable in said guides, a drain pipe communicating with said barrel in one of said semi-cylindrical guides and so positioned as to be closed by one of said curved tongues when the valve is moved to open position, and be open when the valve is moved to closed position.

2. In a hydrant, the combination with a barrel, a valve seat, a vertically movable valve in said barrel, a stem secured to said valve and projecting up through the barrel, semi-cylindrical guides, curved tongues on the opposite sides of said valve movable in said guides, a drain pipe communicating with said barrel in one of said semi-cylindrical guides and so positioned as to be closed by one of said curved tongues when the valve

is moved to open position, and be open when the valve is moved to closed position, a spout on said barrel, a screw threaded block in said barrel, and screw threads on said stem meshing with said block, whereby when said stem is turned the valve will be moved.

3. In a hydrant, the combination with a barrel, a valve seat, a vertically movable valve in said barrel, a stem secured to said valve and projecting up through the barrel, semi-cylindrical guides, curved tongues on the opposite sides of said valve movable in said guides, a drain pipe communicating with said barrel in one of said semi-cylindrical guides and so positioned as to be closed by one of said curved tongues when the valve is moved to open position, and be opened when the valve is moved to closed position, a spout on said barrel, a screw threaded block in said barrel, and screw threads on said stem meshing with said block, whereby when said stem is turned the valve will be moved, and a casing inclosing said barrel.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEWIS M. LANCASTER.

Witnesses:
R. H. KRENKEL,
THEO. RISEMANN.