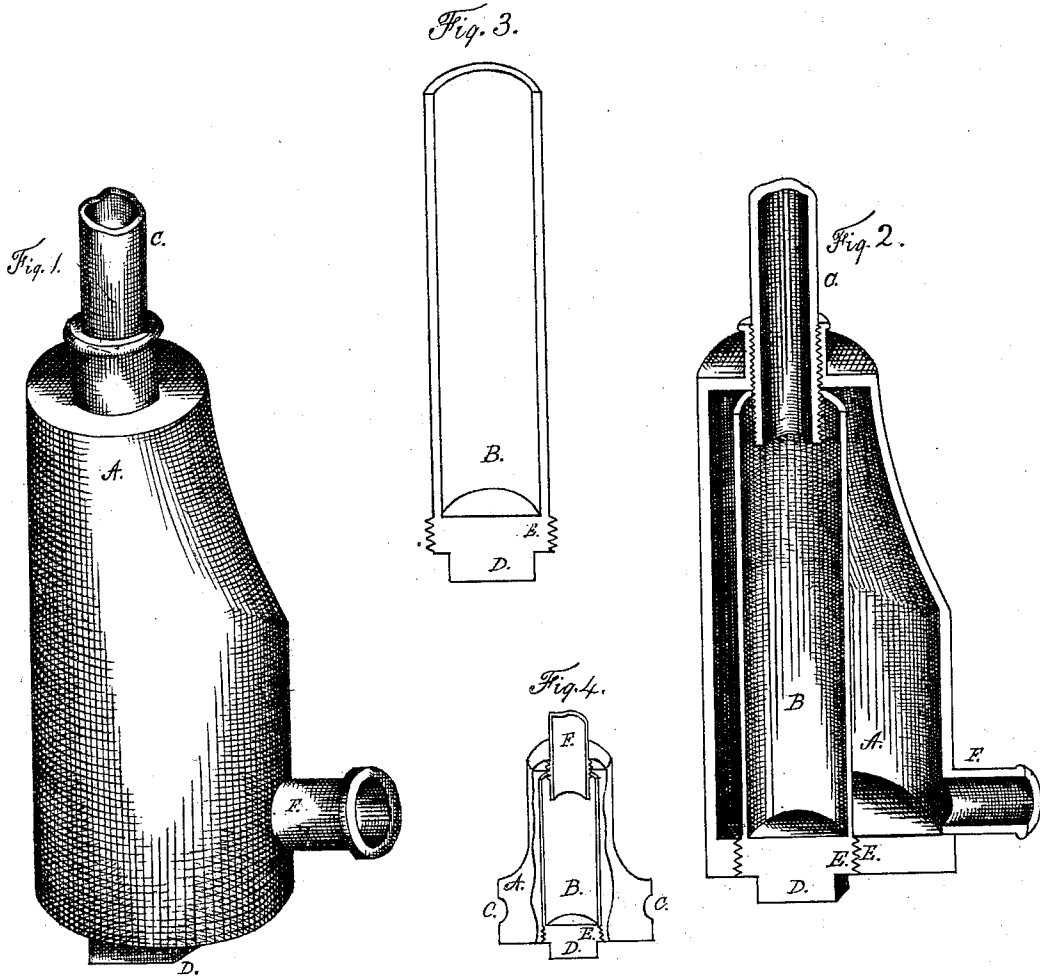


M. W. DIAL.
Lamp-Post.

No. 113,749.

Patented Apr. 18, 1871.



Witnesses

William Curphey
John W. Tyler

United States Patent Office.

MARTIN N. DIAL, OF PAINESVILLE, OHIO.

Letters Patent No. 113,749, dated April 18, 1871.

IMPROVEMENT IN DIRT-CHAMBERS FOR GAS-PIPES.

The Schedule referred to in these Letters Patent and making part of the same.

I, MARTIN N. DIAL, of Painesville, in the county of Lake and State of Ohio, have invented an Anti-Frost and Dirt-Chamber for Gas-Pipes, &c., of which the following is a specification.

Nature and Objects of the Invention.

The object of my invention is to prevent the clogging of the stand-pipe.

The dirt-cup B, which is placed in the interior of the chamber, catches all scale or ammonia crystals that may fall down the interior of the pipe.

The lower end of the stand-pipe dips below the top edge of the cup, thus making it impossible for any dirt to fall into the gas-channel which surrounds the interior cup, and leaving the channel perfectly clear for the passage of the gas.

This invention is also applied to pendent burners, to produce the same effect, as shown at fig. 4, in drawing.

When it is necessary to clean the cup it can be easily removed by unscrewing it.

Also, this invention prevents the gas freezing in the stand-pipe. The gas usually freezes in the stand-pipe about a foot above the surface of the ground, to prevent which the chamber A, which is secured to the bottom of the stand-pipe, is placed in the earth about two feet from the surface, and contains a sufficient body of gas, which, by its pressure and natural heat, prevents the gas freezing in the stand-pipe.

The usual way of setting up a stand-pipe is to couple it to the service-pipe by an elbow-joint of the same size as the pipe. The orifice of the said connection is soon filled up with dirt, and makes it necessary to remove the stand-pipe and discard the elbow when it is necessary to clean it.

Now, my invention does away with all this trouble, as the cup B has sufficient capacity to contain a large amount of dirt, and is easily removed to clean it.

Description of the Accompanying Drawing.

Figure 1 is a view of the chamber complete.

Figure 2, a vertical section of the same, showing the interior dirt-cup B.

Figure 3, vertical section of the dirt-cup B.

Figure 4 shows the application of the invention to a pendent burner.

General Description.

A, fig. 2, is a vertical section of a cylinder, which has a hole formed in its bottom.

Said hole has the thread E' cut in it to receive the corresponding thread E, which is cut on the end of the dirt-cup B. Said cup is passed up through the hole in the cylinder, and is secured in its place by the screw E.

The stand-pipe O passes down through a hole in the top of the cylinder, and its lower end dips below the top edge of the dirt-cup B.

Said stand-pipe is secured in the cylinder by a screw cut on its outside.

The service-pipe enters into the side of the cylinder at the bottom through the pipe-collar F. Said service-pipe is also secured by screwing it in.

At fig. 4 is shown the application to a pendent burner.

F is the suspension or inlet-pipe.

C C are holes to receive the burner-pipes.

B is the dirt-cup, and

D, in all the figures, is a square head or nut for the application of a wrench.

What I claim as my invention, and desire to secure by Letters Patent, is—

The cylinder A, and the interior dirt-cup B, said dirt-cup B being secured in the interior of the cylinder A, substantially as and for the purpose as hereinbefore set forth.

MARTIN N. DIAL.

Witnesses:

WILLIAM CURPEY,
JOHN W. TYLER.