

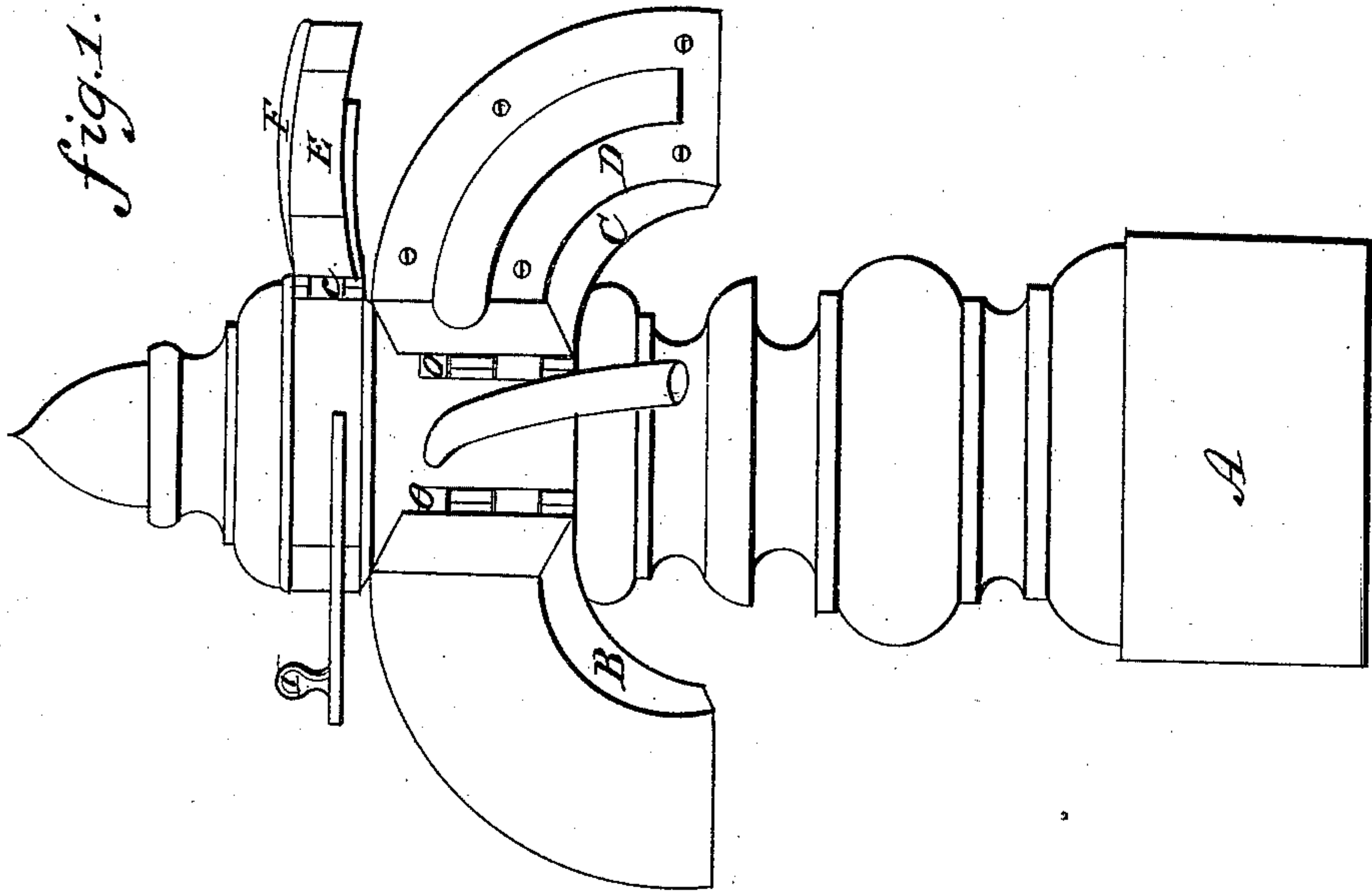
*J. W. Slocum.*

*Hydrant.*

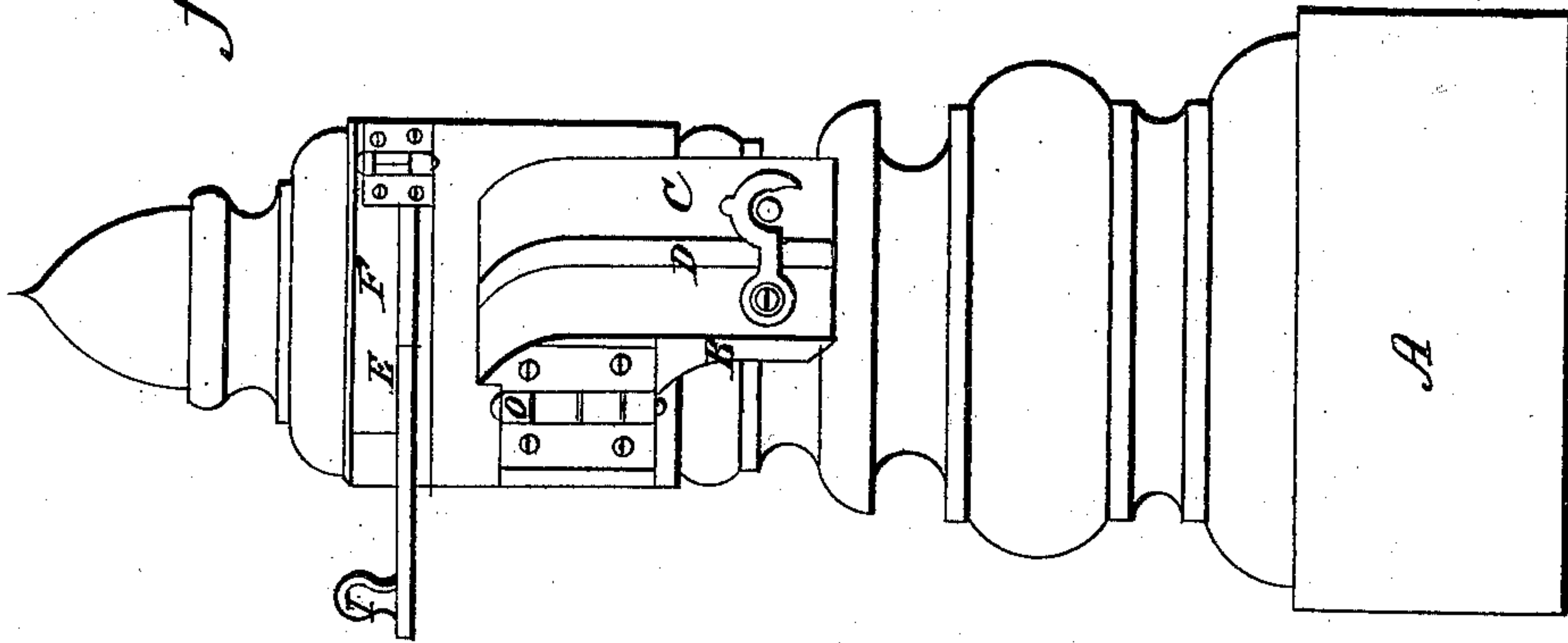
*N<sup>o</sup> 88,589.*

*Patented Apr. 6, 1869.*

*fig. 1.*



*fig. 2.*



*Witnesses.*

*Wm. Prunyan.*

*Herman Metius.*

*Inventor.*

*John W. Slocum.*

# United States Patent Office.

JOHN W. SLOCUM, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 88,589, dated April 6, 1869.

## IMPROVEMENT IN ANTI-FREEZING HYDRANTS.

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

To all whom it may concern:

Be it known that I, JOHN W. SLOCUM, of the city of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Hydrants and Plugs for the Drawing of Water, to prevent them from freezing, styled by me "The Non-Freezing-Hydrant or Plug;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

It is generally known that hydrants and plugs in yards, streets, or places where they are exposed to the weather are liable to freeze in winter, thereby causing great inconvenience and loss by reason of the inability to draw water and bursting of pipes.

Two main causes of this are the remaining of water in the pipe, between the nozzle and the stop-cock of the hydrant, which is generally located below the surface of the ground, and the free access and circulation of cold air from outside to and about the water-pipes within the case of the hydrant or plug.

The nature of my invention consists in the provision of means for excluding the free access of the outside air to the inside of the case, or of the nozzle or supply-pipe.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, observing that it may be readily applied to any hydrant or plug for the drawing of water.

The drawings represent two elevations of a hydrant,

Figure 1 presenting the hydrant with my improvement attached, but thrown open, as it would be when the hydrant is in use, and

Figure 2, the hydrant, with my improvement attached, and closed to serve its intended purpose of a protector against freezing.

Corresponding letters indicate corresponding parts of the hydrant.

A is the outside case of the hydrant, and

I, the handle, for the purpose of turning on or off the water.

At or near the end of the slit farthest from the handle, as in position when the water is fully turned off,

I attach, by a hinge, a piece of wood, metal, or other substance, E, of such size and shape as, when shut in, will fill up, or nearly fill up the slit.

I prefer to have it made so much narrower than the slit as to leave room for and actually to apply to its upper and lower surfaces, respectively, pieces, F F, of India rubber, gutta-percha, woollen, or cotton fabric, or other fabric or substance, that will make joints air-tight, or nearly so.

For the protector, as described, a lid to cover the slit closely may be substituted.

This piece, so fixed to a hinge, serves the double purpose in closing of forcing the handle over to the extreme edge of the slit, so shutting the water entirely off and freezing the supply-pipe between the stop-cock which is operated by a rod attached to the handle and the nozzle of water, and when closed of excluding the access of a free circulation of the outside air to the inside of the case.

I also apply a case, formed of two wings, B and C, made of wood, metal, or other substance, working on hinges attached to the outside of the hydrant-case alongside of the nozzle, so constructed that when closed, as shown in fig. 2, they will completely cover or shut in the nozzle, and so exclude the free access of the outside air as well from the aperture as from the sides of the nozzle.

I also prefer to attach to the inside surface of the wing C (or, indeed, of both or either of the wings) a piece or pieces, D, of India rubber, gutta-percha, cotton, or woollen fabric, or of any other fabric or substance, to form, when the case is closed, along the surfaces of contact of the two wings B and C, joints, air-tight, or nearly so.

These wings I fasten, when closed, with a catch.

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

A hydrant, having its delivery-spout, or nozzle, protected by a bisected case, and the slot for the valve-arm, supplied with a hinged segment, the closing of which will cut off the flow, all substantially as shown and described.

Witnesses:

WM. RUNYAN,  
HERMAN METIUS.

JOHN W. SLOCUM.