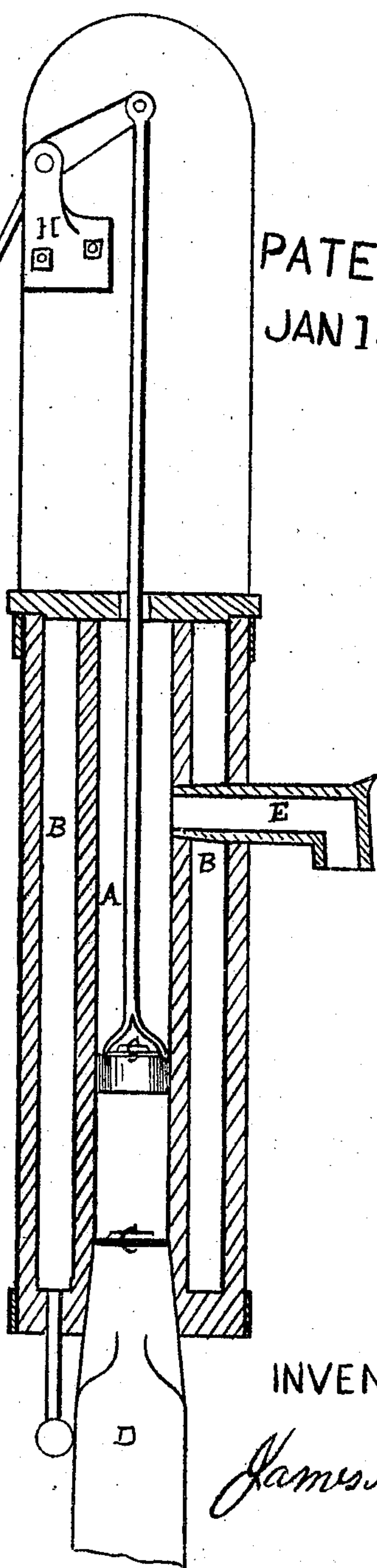
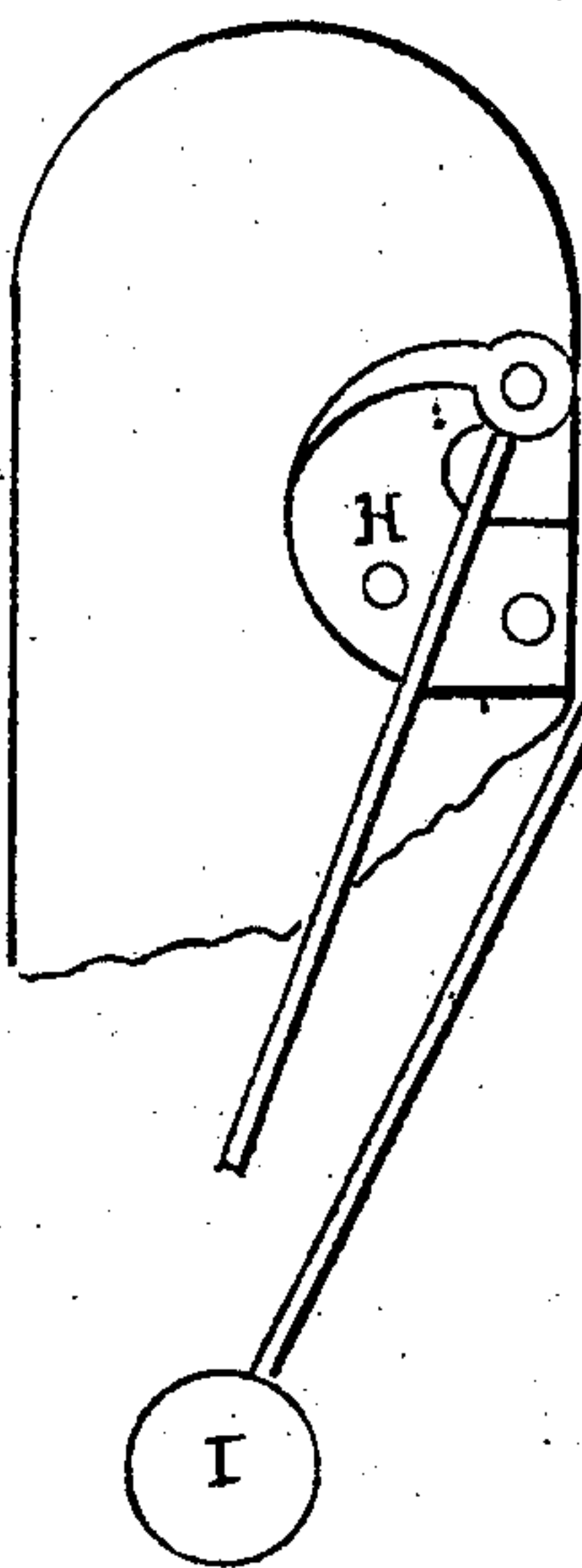
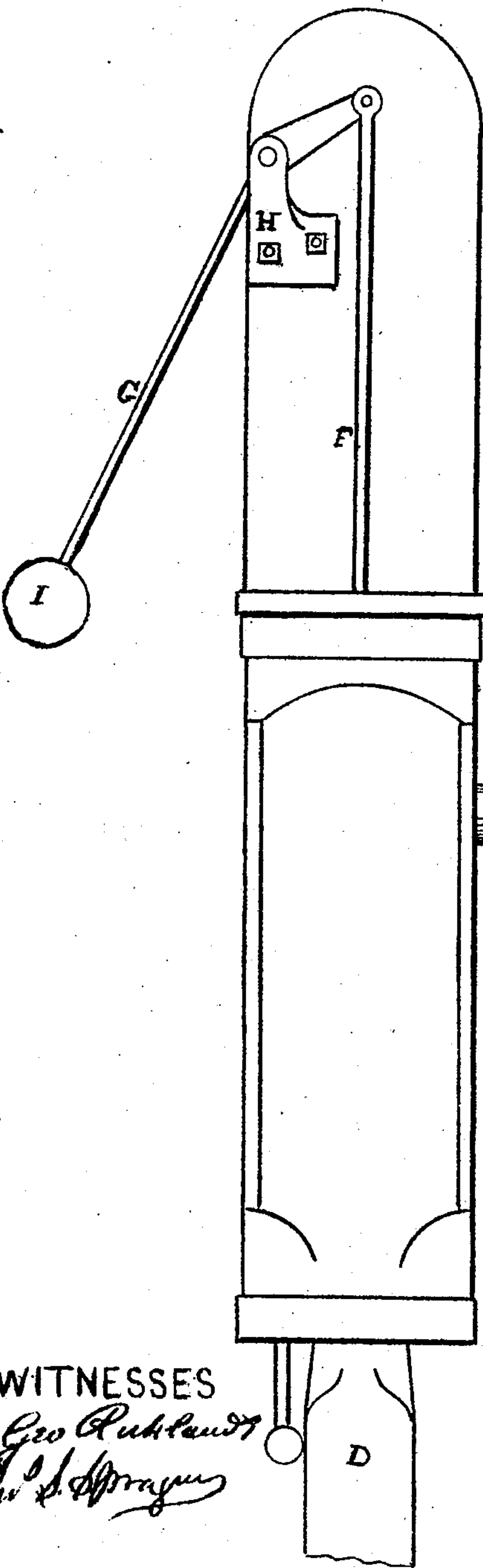


JAMES McBRIDE'S
SELF VENTILATING & ANTIFREEZING
73253 PUMP

FIG

FIG

FIG



PATENTED
JAN 14 1868

WITNESSES

Geo. A. Hubbard
Thos. A. Sprague

INVENTOR

James M. McBride

United States Patent Office.

JAMES McBRIDE, OF FLINT, MICHIGAN.

Letters Patent No. 73,253, dated January 14, 1868.

IMPROVEMENT IN PUMPS.

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

TO WHOM IT MAY CONCERN:

Be it known that I, JAMES McBRIDE, of Flint, in the county of Genesee, and State of Michigan, have invented a new and useful Self-Ventilating Anti-Freezing Pump; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and making a part of this specification.

Figure 1 is a front view of my invention.

Figure 2 is a back view of the same partially in section.

Figure 3 is a vertical sectional view of the same.

The same letters of reference indicate like parts in each figure.

The object of my invention is well explained by the name I have given it. It is well known that the air in wells and cisterns is warmer than the outer air, and that this air confined in wells and cisterns frequently becomes foul. My invention provides a way to get rid of this foul air, by so constructing the pump that I leave an annular space around the valve-chamber, which space extends from the bottom to the top of the pump. Or, if more desirable, a series of small bores might be made around the pump-bore, leading from the bottom to the top of the pump.

By constructing a pump, as above described, as the warmer air in the well or cistern rushes out through the annular space or through the bores, heretofore referred to; it prevents the water in the pump-chamber from freezing.

I attach the pump-rod to the handle or lever in the ordinary manner, but I use a combined bearing and brake to attach the lever or handle to the standard. This bearing is so constructed that it acts as a brake upon the handle or lever, and prevents the plunger of the pump from going too far. My invention can be attached to any pump when properly constructed, whether of wood or metal.

Having thus explained the object of my invention and its construction, I will now name its various parts, so that any one skilled in the art can manufacture it.

A is the pump-chamber; B B is the annular space or bores; C C are the valves; D is the pump-log; E is the spout; F is the pump-rod; G is the handle or lever; H is the combined bearing and brake; I is a counter-balance on the handle or lever.

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

An enclosed annular space around the pump-cylinder, deriving a supply of air from the well, substantially as and for the purpose described.

JAMES McBRIDE.

Witnesses:

THOS. S. SPRAGUE,
GEO. RUHLANDT.