

W. M. Hamilton,

Pump Valve.

No. 103738.

Patented May 31, 1870.

Fig 1.

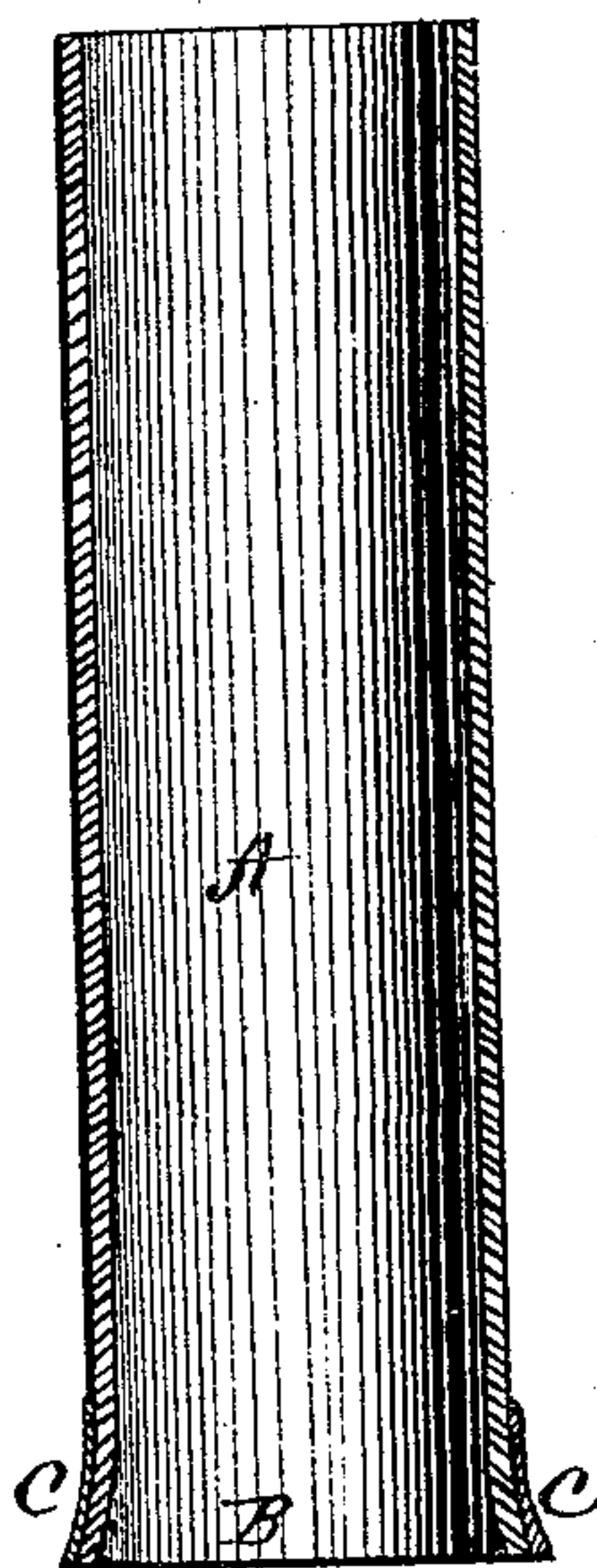


Fig 3

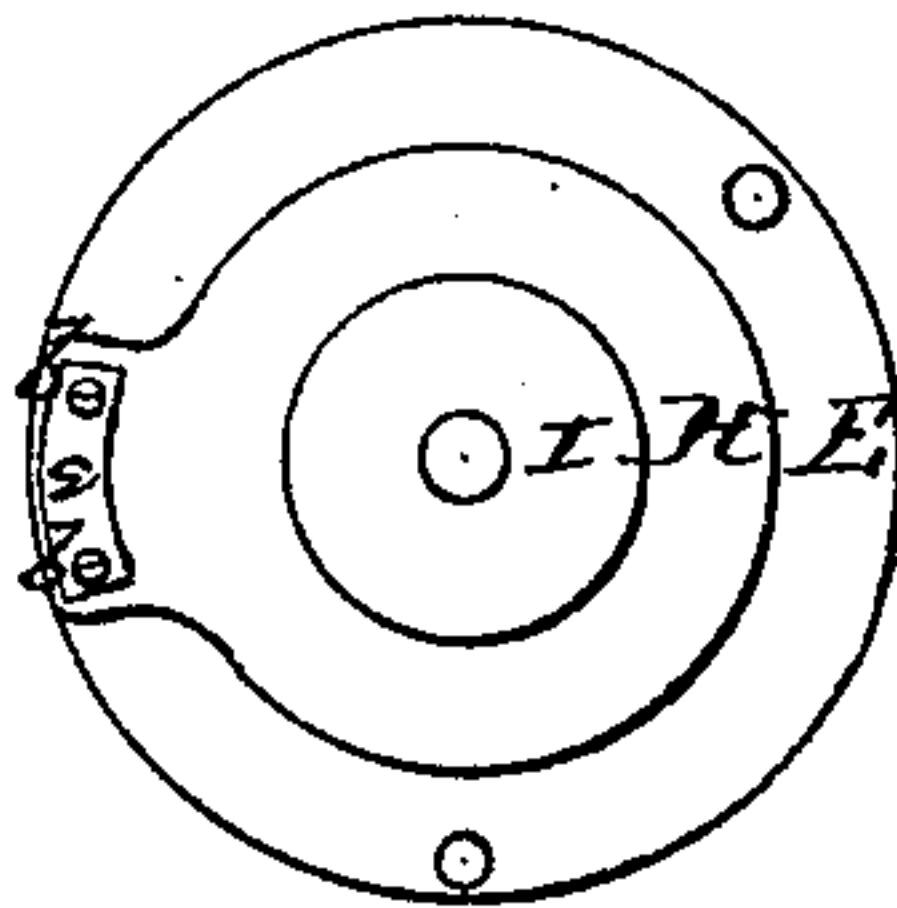
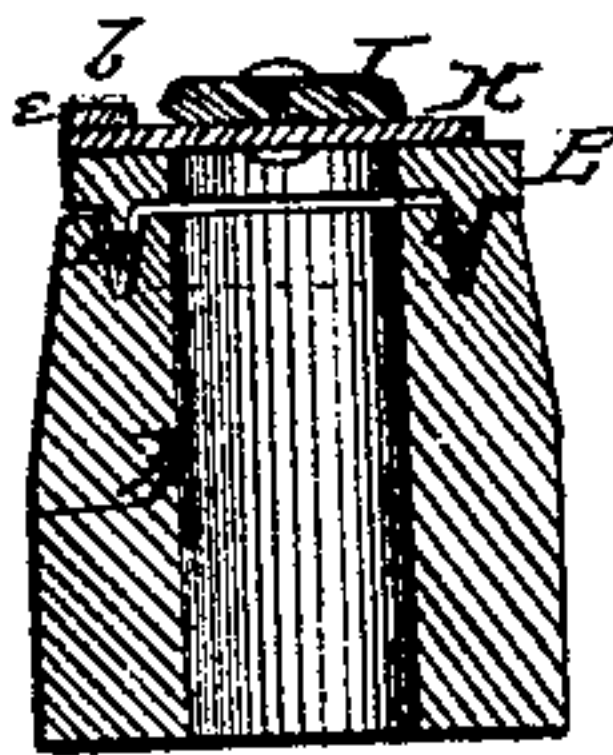


Fig 2



Witnesses

E. M. Corpley  
Chas. L. Curtis

Inventor

W. M. Hamilton  
per  
Alexander Mason  
Att'y.

# United States Patent Office.

WILLIAM M. HAMILTON, OF JACKSONVILLE, ILLINOIS.

Letters Patent No. 103,738, dated May 31, 1870.

## IMPROVEMENT IN PUMPS.

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, WILLIAM M. HAMILTON, of Jacksonville, in the county of Morgan and in the State of Illinois, have invented certain new and useful Improvements in Pumps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction of a metal tube, to be inserted in the usual log pump, and also in the construction of valves for such pumps.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section of the metal tube;

Figure 2 is a vertical section of the valve; and

Figure 3 is a plan view of the same.

A represents a tube, of suitable size, made of galvanized iron, zinc, copper, or other material, provided with a flaring bottom, B, and having a band, C, around said flaring bottom, so as to increase its size and strength.

This tube is to be inserted in the bottom of the usual log pump, and driven up into the same, the flaring bottom B and band C causing it to wedge tightly when so driven up.

The flaring or bottom end of the tube A is to receive the lower tubing or conducting-pipe D, upon the upper end of which is to be fastened the valve-seat E.

This valve seat consists of a flat metal ring, having a circular flange, *a*, on its under side, which is driven

into the end of the wood, as shown in fig. 2. This prevents leakage under the valve-seat.

The valve H consists of a piece of leather, of suitable size, secured to the upper side of the valve-seat E, by means of screws *b b*, a metal plate or bar, *e*, being first placed on the valve, through which the said screws also pass.

In the center of the valve H is secured a metal disk, I, as shown in the drawing.

My invention has at least two great advantages. First, the tube A, within which the plunger works, prevents the log from wearing out, and, in many instances, lasting four or five times as long as it would without it. Secondly, the valve-seat will effectually prevent the leaking of the water back out of the pump, thus leaving the pump dry.

The common way of making valves in the wooden pumps is to nail a piece of leather on the top of the tubing, and the water, in that case, soon cuts channels under the valve, and runs back from the pump. This is entirely obviated by my construction of the valve and valve-seat.

Having thus fully described my invention,

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

The valve-seat E, provided on its under side with the tapering circular flange, in combination with the tube D, valve H and tube A, the latter provided with a flaring mouth, B, surrounded by the band C, all substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 24th day of January, 1870.

Witnesses:

W. M. HAMILTON.

A. E. MINCK,  
S. S. KNOBS.