

Lavers & Lamb,

Rotary Pump.

No. 102,136.

Patented Apr. 19, 1870.

Fig. 1.

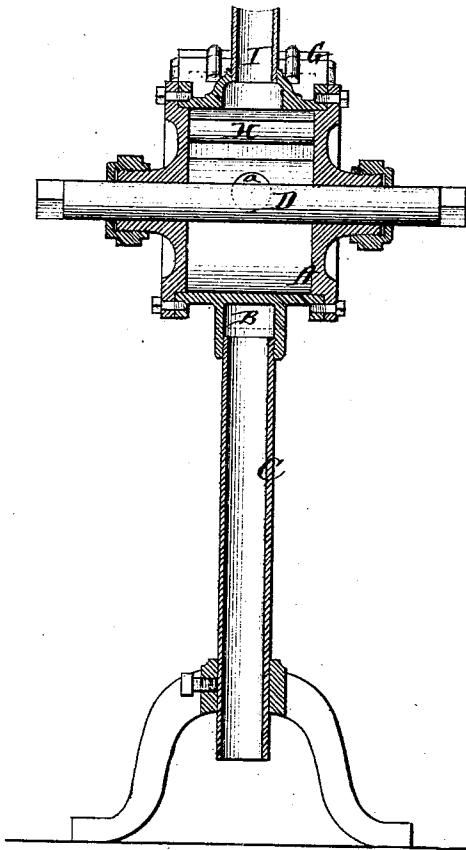
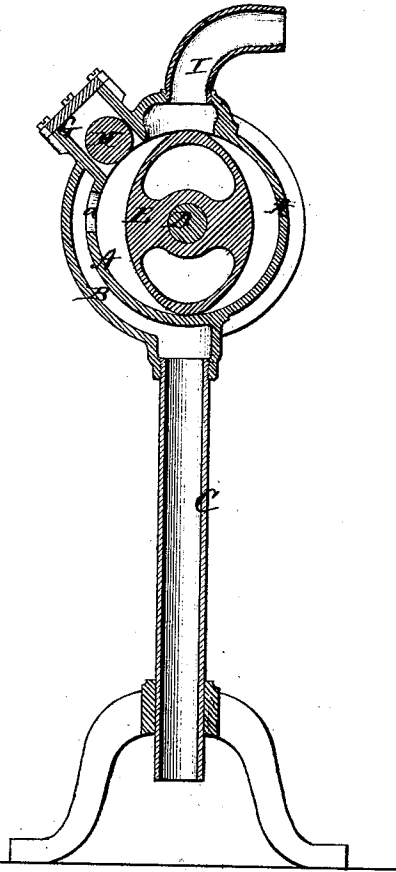


Fig. 2.



Witnesses:
C. S. Owen
A. A. Marr

Inventor
Erwin Lavers
James C. Lamb
per Alexander Mason
attys.

United States Patent Office.

ERWIN LAVENS AND JAMES C. LAMB, OF MIDDLETOWN, CONNECTICUT.

Letters Patent No. 102,136, dated April 19, 1870.

IMPROVEMENT IN ROTARY 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 we, ERWIN LAVENS and JAMES C. LAMB, of Middletown, in the county of Middlesex and in the State of Connecticut, have invented certain new and useful Improvements in Rotary Pumps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the construction and arrangement of a "rotary pump," as will be more fully hereinafter described.

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

Figure 1 is a longitudinal vertical section, and

Figure 2, a transverse vertical section of our pump.

A represents the outside cylinder, provided with a channel, B, along one side on the outside, an aperture, *a*, leading from the upper end of said channel into the outer cylinder:

At the lower end of the channel B, the supply-pipe C is secured, so that the water is drawn up through said pipe into the channel B, and through the aperture *a* into the outer cylinder A.

On a shaft, D, passing through the end pieces of the cylinder, is secured an inner cylinder, E, of oval shape.

On the outside cylinder A is formed a recess or chamber, G, within which is placed an abutment-roller, H.

This roller is placed about twenty degrees from a perpendicular line through the center of the cylinders.

The pressure of this roller is divided between the lower side of the chamber G and the surface of the inside cylinder E, and this cylinder, being, as described, of an oval shape, when rotated, produces a vacuum on one side of the abutment-roller H, and discharges on the other through the discharge-pipe I.

The inside cylinder E is oval in shape, viewing it endwise; but it is not a true oval, the longest diameter being fitted to the inside of the outside cylinder, and for a short space is of the same circle. Therefore,

We do not wish to confine ourselves to any exact shape of the inside cylinder, or to any exact shape or position of the chamber containing the roller H; but

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

The arrangement of the supply-pipe C, cylinder A, with channel B, aperture *a*, egg-shaped cylinder E, upon the cross shaft D, box G, with removable cover, roller H, and outlet-pipe I, all constructed to operate substantially as set forth.

In testimony that we claim the foregoing, we have hereunto set our hands and seals this 10th day of February, 1870.

ERWIN LAVENS. [L. s.]
JAMES C. LAMB. [L. s.]

Witnesses:

NORMAN L. BRAINERD,
ASTB HYDE.