(No Model.) 2 Sheets—Sheet 1.

L. BOUVIER.

PUMP.

No. 249,499. Patented Nov. 15, 1881.

Fig. 1.

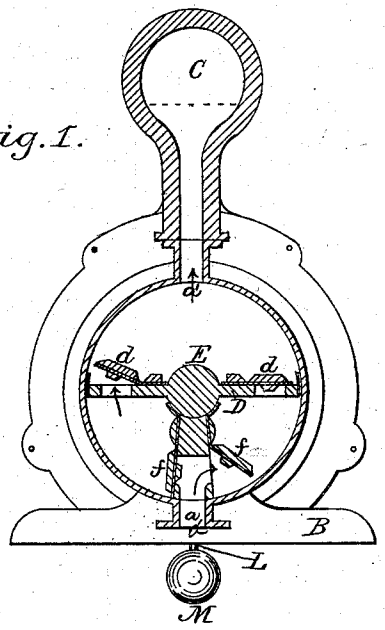
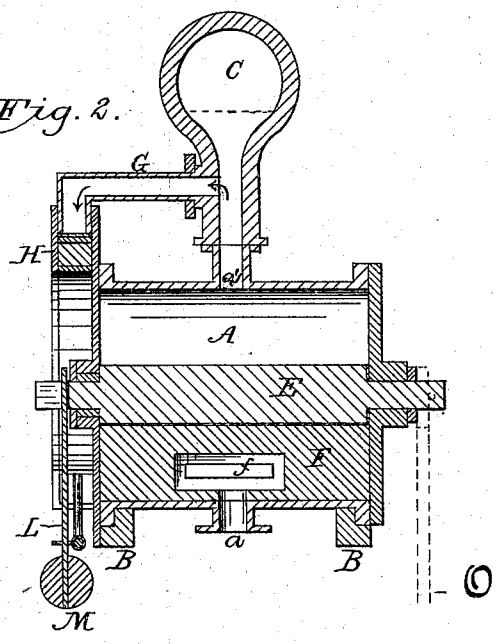


Fig. 2.



WITNESSES

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Louis Bouvier
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N. PETERS. Photo-Lithographer. Washington, D. C.

(No Model.)

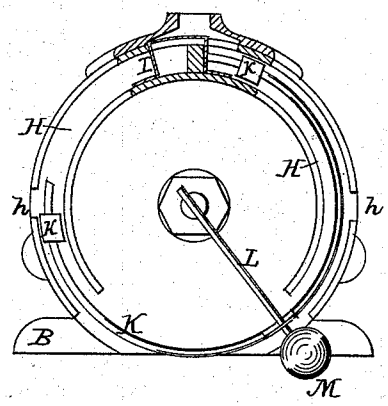
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Fig. 3.



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UNITED STATES PATENT OFFICE.

LOUIS BOUVIER, OF SAN DIEGO, CALIFORNIA.

PUMP.

SPECIFICATION forming part of Letters Patent No. 249,499, dated November 15, 1881.

Application filed August 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, LOUIS BOUVIER, a citizen of the United States, residing at San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Pumps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention consists of a novel construction and arrangement of devices in an oscillating pump, which will be understood by the following description and claim.

In the accompanying drawings, Figure 1 is a vertical transverse section of my improved pump. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is an end view, with the plate removed from the curved discharge-passages.

In constructing my pump the cylinder A may be supported on bed-pieces B, or in any other suitable manner. The cylinder has a central supply-opening, *a*, and a discharge-opening, *a'*, above which is an air-chamber, C. In the cylinder A is the oscillating piston D, which swings on the central shaft, E, and has two valves, *d*, Fig. 1, the piston and valves being all leather-packed. At the bottom of the cylinder is a radial partition, F, provided with two valves, *f*, communicating with the supply-passage *a*, as seen in Fig. 1. The water, after passing from the cylinder A, flows through pipe G and enters the curved passages H, to be discharged at openings *h*, Fig. 3. These curved passages H are provided with a double-headed shuttle-valve, I, which is operated by means of curved rod K, which is carried on the radial arm L, attached to the axle or shaft E, and having a ball or weight, M, Fig. 2. The rod K has two guides, *k*, to steady the motion of the rod.

Motion may be given to the pump by means of the swinging lever O or other suitable devices.

Having described my invention, what I claim is—

In an oscillating pump having a horizontal cylinder and oscillating piston provided with valves, and also a radial partition having check-valves therein, the water-passage G, in connection with the air-chamber C, in combination with the shuttle-valve I, curved passages H, and curved rod K on the swinging radial arm L, having the ball or weight M, substantially in the manner and for the purpose set forth.

LOUIS BOUVIER.

Witnesses:
M. BRUSCHI,
J. M. FRIGERIO.