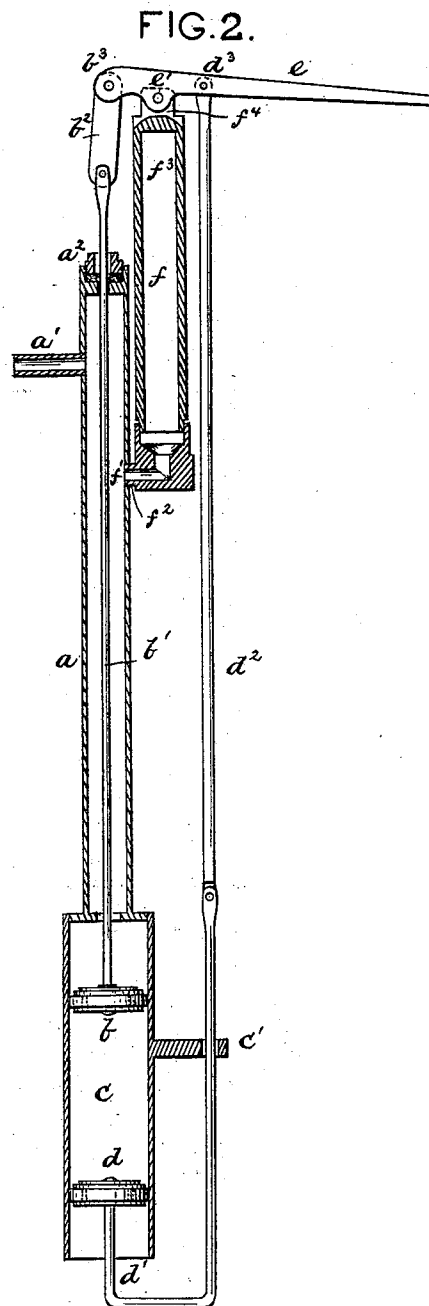
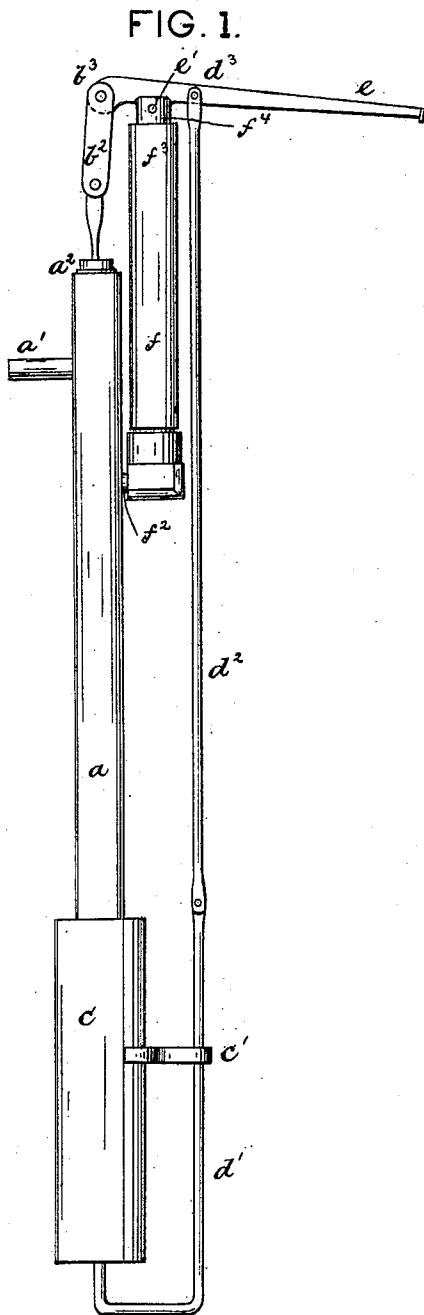


(No Model.)

W. S. LANEY.
Pump.

No. 228,203.

Patented June 1, 1880.



Witnesses:

Elemer M. Sites.
Wm. W. Lacey

Inventor:

William S. Laney
By R. S. & A. Lacey Attys:

UNITED STATES PATENT OFFICE.

WILLIAM S. LANEY, OF LITHOPOLIS, OHIO.

PUMP.

SPECIFICATION forming part of Letters Patent No. 228,203, dated June 1, 1880.

Application filed March 9, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. LANEY, a citizen of the United States, and residing at Lithopolis, in the county of Fairfield and State of Ohio, 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 of reference marked thereon, which form a part of this specification.

This invention relates to that class of pumps having two pistons operated by a single lever.

It consists in the combination and arrangement of the several parts, as will be hereinafter fully explained, and pointed out in the claim.

In the drawings, Figure 1 is a side elevation, and Fig. 2 a vertical section, of a pump constructed according to my invention.

a is the pump-stock, having the discharge-spout a' . On the upper end of the stock a I put a packing-ring or cap, a^2 , through which the piston-rod b passes. The rod b' is packed in the cap a^2 , as shown, so as to make it airtight, or nearly so.

On the lower end of the stock I place the cylinder c , in which the pistons b and d operate. The piston b is operated by the rod b' , which passes up through the stock and through the packing-ring a^2 , and has its upper end connected to a link, b^3 , which connects it to the end of the operating-lever e .

The piston d is placed in the lower end of the cylinder, and has its rod d' attached to its under side, as shown. The rod d' descends vertically from the piston d and passes out at the open lower end of the cylinder. It is then bent at right angles, as shown, and is carried upward on the outer side of and parallel with the cylinder and through a bearing or support, e' . To the upper end of the rod d' is pivoted the connecting-rod d^2 , which extends to and has its upper end pivoted to the handle e .

f is a hollow cylinder, closed at its upper end and having the opening f' at its lower end, and connecting with the stock a by a nipple or stem, f^2 , through which the opening f' passes.

The nipple f' is inserted into the stock a at a point below the discharge-spout a' . The upper end, f^3 , of the cylinder is extended above the upper end or cap, a^2 , of the stock, and is provided with a lug, f^4 , to which the lever e is pivoted.

The bearings or pivoted points b^3 b^3 on the lever e , to which points the piston-rods b^2 and d^2 are attached, are arranged on opposite sides of the pivoted point e' , on which the said lever turns. This arrangement will cause one of the pistons to be raised at the instant the other is lowered, and vice versa.

The action of the air-chamber f , together with the double action of the valves or pistons b and d , will give a rapid and continuous flow of water from the spout a' . The air-chamber f , being carried above the top of the pump, gives a greater reacting pressure of air than is obtained in the ordinary structures for this purpose, and the cylinder containing the air-chamber serves as a support for the operating-lever and piston-rods and their pistons.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the stock a , having the cylinder c on its lower end, the piston b , having its rod b' extended upward through the stock a , the piston d , having its rod passed downward out of the cylinder and bent and carried upward outside of the stock, of the air-casing f , closed at its upper end and opening into the stock a below the discharge-spout a' , and having its upper end extended above the top a^2 of said stock, and provided with a lug, f^4 , and the lever e , pivoted to the lug f^4 , and provided with bearings b^3 d^3 , arranged on opposite sides of the pivoted center e' , and having the upper ends of the rods b' d' attached thereto, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of March, 1880.

WILLIAM S. LANEY.

Witnesses:

J. F. MCKINLEY,
JESSE DRUM.