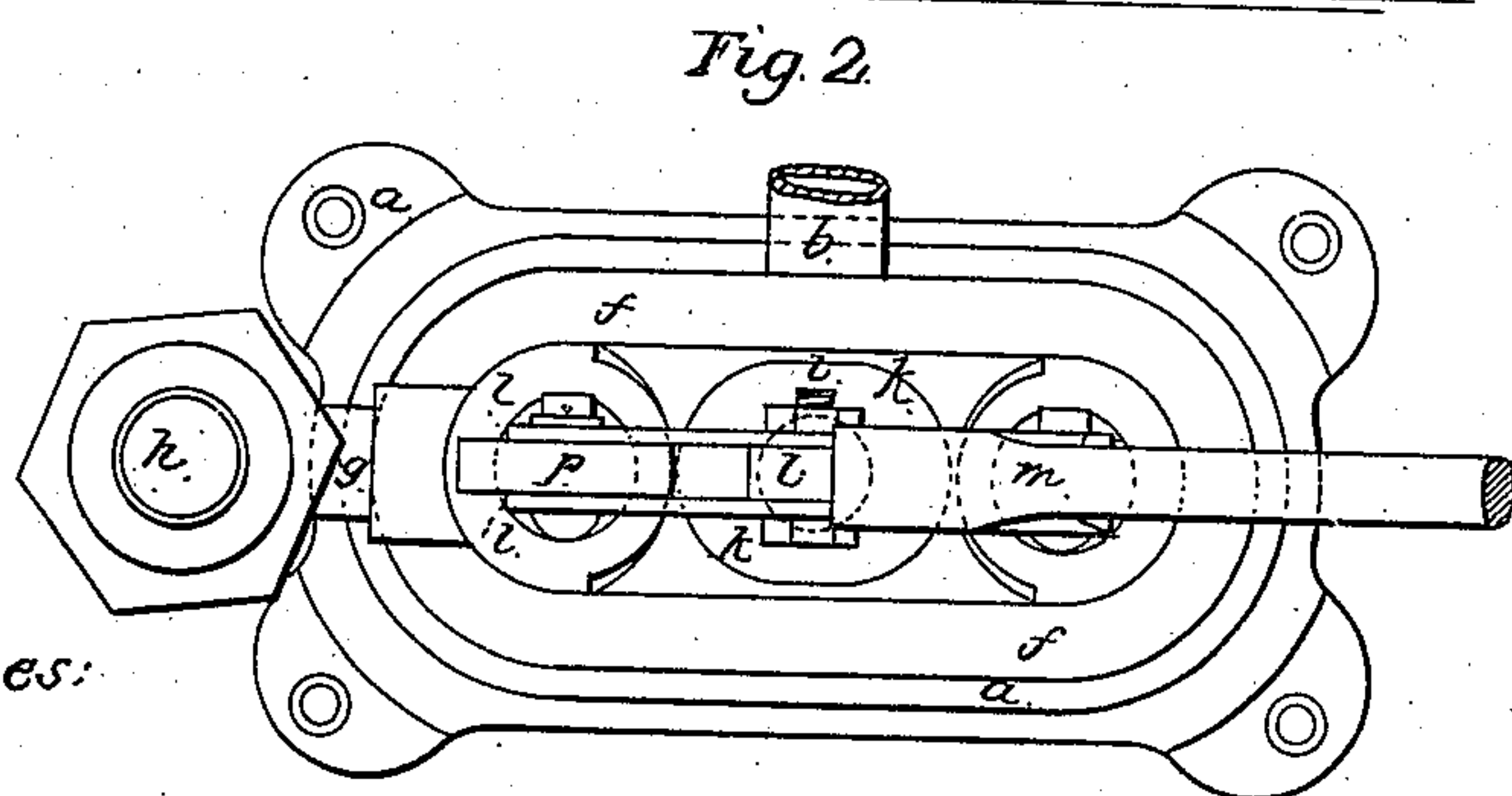
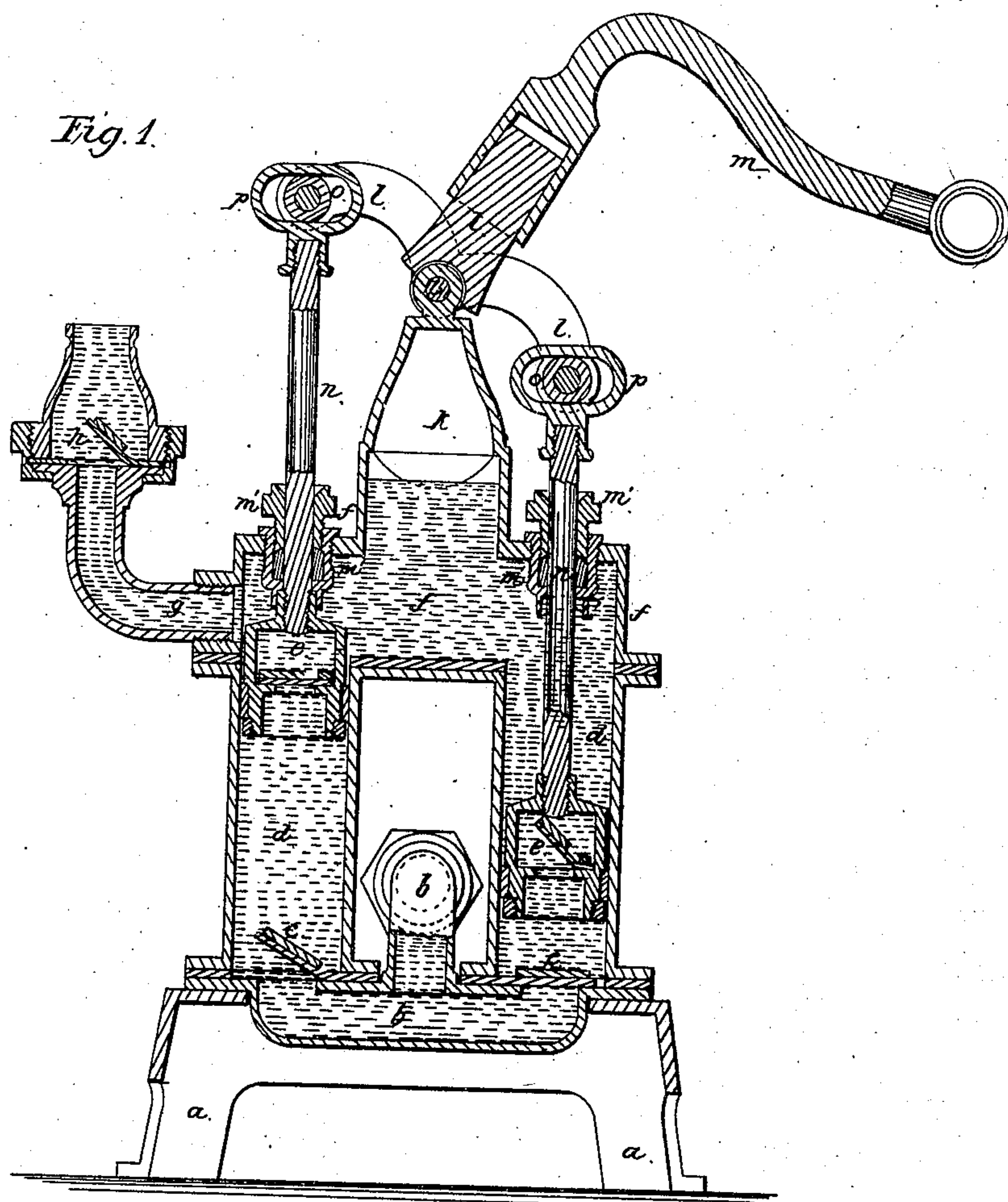


W. D. Baxter,
Double-Acting Pump,
N^o 83,027. Patented Oct. 13, 1868.



Witnesses:

Geo. Draeger
Chas. Smith

Inventor:

Wm D Baxter

United States Patent Office.

WILLIAM D. BAXTER, OF NEW YORK, N. Y.

Letters Patent No. 83,027, dated October 13, 1868.

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 D. BAXTER, of the city and State of New York, have invented and made a certain new and useful Improvement in Double-Acting Lift and Force-Pumps; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification wherein—

Figure 1 is a vertical section of said pump, and

Figure 2 is a plan of the same.

The same parts are referred to by corresponding letters.

This pump is particularly adapted to domestic use in country places, where the water is drawn from a well and forced up into a reservoir, but may be used on any other occasion.

My invention consists in arranging the air-vessel over and between the two pumps, to form the fulcrum for the lever, in combination with a water-way connecting the open ends of the pumps with the delivery-pipe and check-valve, the piston-rods passing through stuffing-boxes at the top of the water-way, and connecting by slots and friction-rollers with the brake or lever. By this arrangement, the pump can be attached to the floor in some otherwise useless corner, and be out of the way, but at the same time very easily operated, and the parts are not likely to get out of repair, and can be easily got at for keeping in order.

In the drawing, *a* is a base to be bolted to a floor or platform; *b* is the inlet-water pipe; *c c* are the induction-valves to the cylinders *d d*, in which are the pistons and valves *e e*.

f is a cap over the top of the cylinders *d d*, forming a water-way that terminates in the eduction-pipe *g*, with the check-valve *h*, and this waterway *f* rises and forms the air-vessel *k*, and also receives the fulcrum

i of the lever *l*, that is worked by the removable lever or brake *m*, provided with a socket, setting over a square on *l*.

The piston-rods *n* pass through the stuffing-boxes *m'*, that guide and sustain them while being operated by the rollers *o o*, in jaws formed by the lever *l*, said rollers entering yoke-pieces *p*, that are formed at the ends of the piston-rods *n*.

It will now be understood that this pump is very compact, easily applied to or removed from the pipes, can be set into a small compass, and can be easily worked and kept in order.

I am aware that pumps have been made with an air-vessel that forms the fulcrum for the lever, but the arrangements of the interior portions of the pump are different from mine, and the lever is connected to the piston-rods by links. In my pump, the rollers *o* and yoke-pieces *p* enable me to obtain a very free movement in a less space than heretofore; hence my pump is very compact, and can be worked in a space that would be insufficient for other pumps of the same capacity.

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

The pistons *e* and yoke-pieces *p*, actuated by the rollers *o* and lever *l*, in combination with the pumps *d d*, and water-way, *f*, provided with stuffing-boxes for the piston-rods *n*, and an air-vessel, *k*, the parts being arranged and constructed substantially as specified.

In witness whereof, I have hereunto set my signature, this 30th day of November, A. D. 1867.

WM. D. BAXTER.

Witnesses:

GEO. D. WALKER,
CHAS. H. SMITH.