L. Beemer,

Double-Acting Pump.

No. 52,485. Patented Feb. 6, 1866.

Fig: 1.

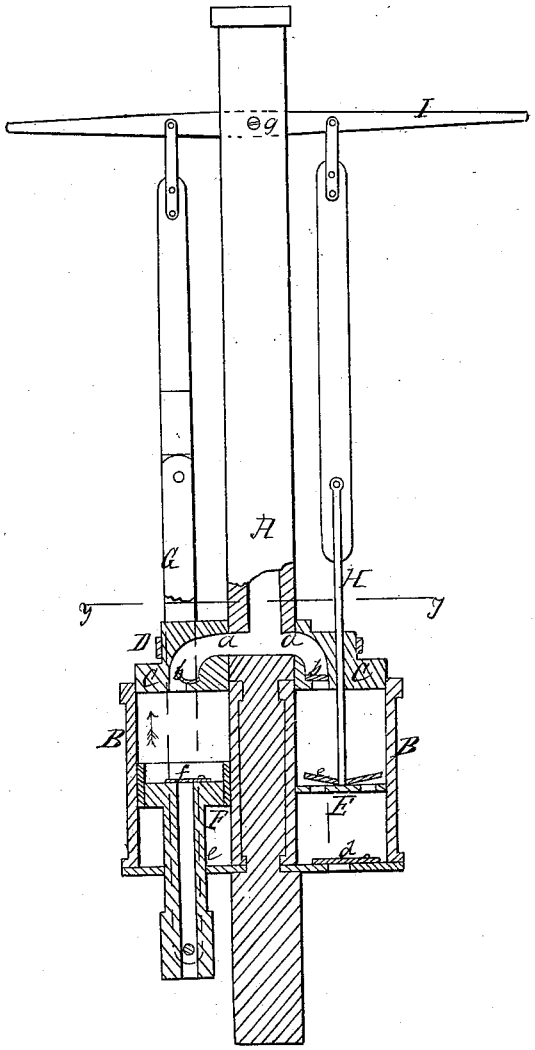


Fig: 2.

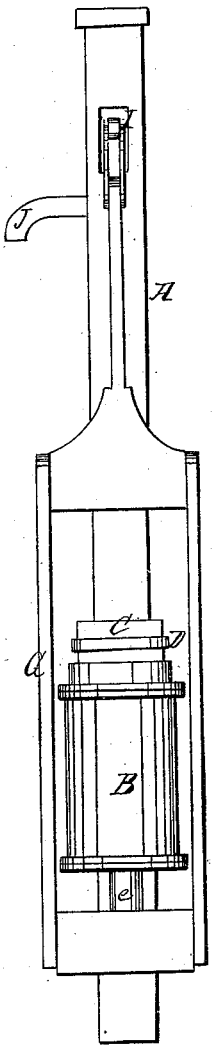
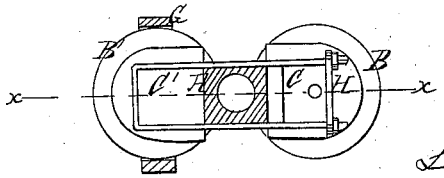


Fig: 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

LEVI BEEMER, OF LIBERTYVILLE, ASSIGNOR TO HIMSELF AND J. H. WILLIAMSON, OF BRANCHVILLE, NEW JERSEY.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **52,485**, dated February 6, 1866.

To all whom it may concern:

Be it known that I, LEVI BEEMER, of Libertyville, in the county of Sussex and State of New Jersey, have invented a new and Improved Pump; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional elevation of my invention, taken in the line *x x*, Fig. 3; Fig. 2, a side view of the same; Fig. 3, a horizontal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved pump in which the suction or lift and the force pump are combined, and by which almost all of the water in a well or reservoir may be drawn. The invention is designed for what is commonly termed a "submerged" pump, the cylinders being placed near the bottom of the well or reservoir.

A represents a standard or upright shaft, near the lower end of which, at opposite sides, two cylinders, B B′, are secured, said cylinders being "let in" the upright as shown in Fig. 1, and having their heads C C′ clasped to the upright by a metal clamp, D, (shown clearly in Figs. 1 and 3.) The upright A may be of wood, and it is tubular and made to communicate with the two cylinders B B′ by means of passages *a a′*, each of which, at its lower end, is provided with a valve, *b*, opening upward, as shown clearly in Fig. 1.

The cylinder B is provided with a piston, E, having valves *c*, opening upward, and the bottom of said cylinder is provided with a valve, *d*, also opening upward, as shown clearly in Fig. 1. The other cylinder, B′, has its piston F provided with a shank, *e*, the lower end of which is formed like a cross-head, and fitted in the lower end of a yoke, G, which encompasses the cylinder B′, as shown in Fig. 2.

The piston F is tubular, and it has a valve, *f*, on its upper end, opening upward, the bore of the piston F extending through the lower cross-head of the yoke.

The yoke G and rod H of the piston E are connected to the ends of a brake or lever, I, which passes through the tubular standard A and works on a pivot or fulcrum, *g*.

By this arrangement it will be seen that the pistons F and E will work alternately up and down, the piston E and cylinder B drawing up the water, and serving as a lift or suction pump, while the cylinder B′ and piston F serve as a force-pump to expel the water up through standard A and out of a spout, J, at the upper part of said standard.

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

The combination of the two pump-cylinders B B′ with the pistons F E and valves and the yoke G, arranged to operate substantially in the manner as and for the purpose set forth.

LEVI BEEMER.

Witnesses:
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