W. D. BAXTER.

Pumps.

No. 137,527. Patented April 8, 1873.

Fig. I.

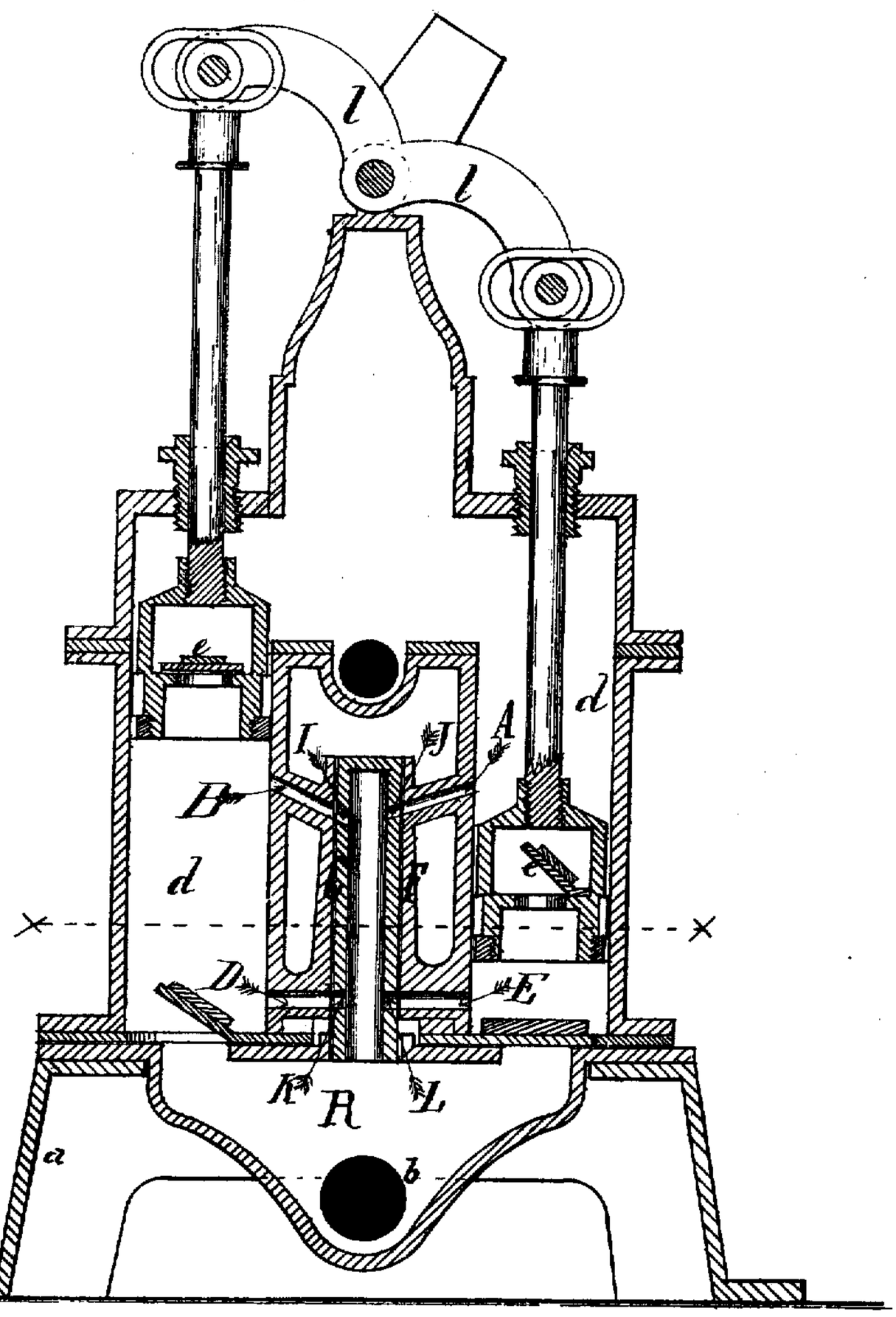
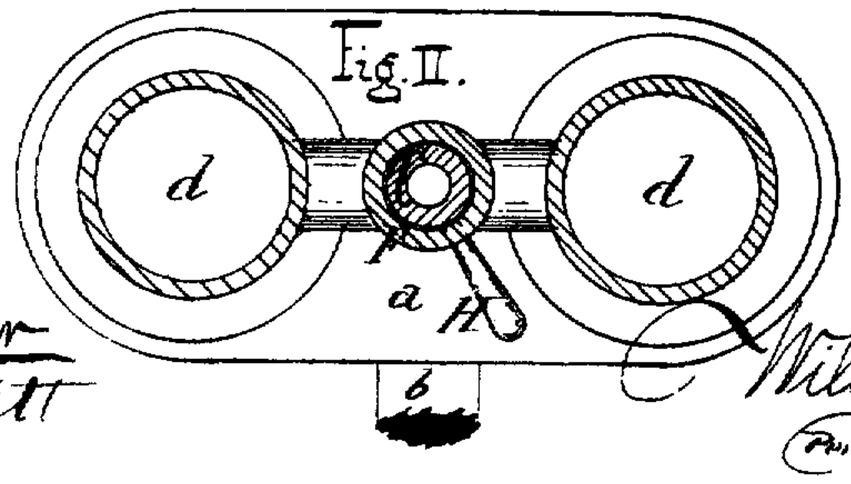


Fig. II.



Witnesses:
Richard Gerner
Franklin Garrett

Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM D. BAXTER, OF NEW YORK, N. Y., ASSIGNOR TO SANDS & BAXTER, OF SAME PLACE.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **137,527**, dated April 8, 1873; application filed February 7, 1873.

To all whom it may concern:

Be it known that I, WILLIAM D. BAXTER, of the city, county, and State of New York, have invented certain Improvements in Pumps, of which the following is a specification:

The object of my invention is to remedy certain defects in double-acting lift and force pumps for which Letters Patent No. 83,027 were granted to me, dated October 13, 1868. Destruction of the pumps, great inconvenience and damage by water have been the results of not being able to sufficiently empty the pump of the water to prevent the bursting of the cylinders in cold weather. In order to overcome these difficulties, I make use of a double-acting cock, placed between the two cylinders, by which I am enabled to empty the water out of the upper part and out of the cylinders down into the reservoir and outlet-pipe below with one movement of the cock without having to empty the pump of the water by use of separate cocks and employment of separate vessels for carrying off the water.

In order to more fully describe my invention, I refer to the accompanying drawing forming a part of this specification.

Figure I is a vertical section of said pump embodying my invention. Fig. II is a cut section through line *x x*, Fig. I.

a is the base; *b*, the inlet-water pipe, which is placed at the bottom or side of the reservoir R in order to cause the water to run out of R, and also for placing the double-acting cock C and the pipes or channels A, B, D, and E between the cylinders *d d*. F is the cock-cylinder, into which the channels or pipes A, B, D, and E lead. In this cylinder is placed the cock C, with handle H, which former is made hollow, with four openings, I, J, K, and L, which are made to correspond with the holes in the pipes or channels A, B, D, and E.

By ceasing to pump one of the piston-valves *e* is left at the bottom of one of the cylinders *d*, while the other valve *e* is left at the top of the cylinder *d* by placing the lever *l* in a slanting position. By placing the handle H of the cock C parallel with the inlet-pipe *b* the openings in the cock-barrel I, J, K, and L come opposite the openings A, B, D, and E, by which the water in the upper part is made to flow down into the lower part or reservoir R, from which it is emptied into the inlet-water pipe *b*. By turning the handle H of the cock C to the right or left the openings A, B, D, and E are shut off by the cock C, and the pump is worked as ordinarily.

Having thus fully described my invention, I desire to claim—

The double-acting hollow cock C with openings I, J, K, and L, cylinder F with pipes or channels A, B, D, and E, in combination with the pump-cylinders *d d*, reservoir R, and inlet-pipe *b*, substantially as and for the purpose hereinbefore set forth.

This specification signed this 6th day of February, 1873.

WM. D. BAXTER.

Witnesses:

FRANKLIN BARRITT,

RICHARD GERNER.