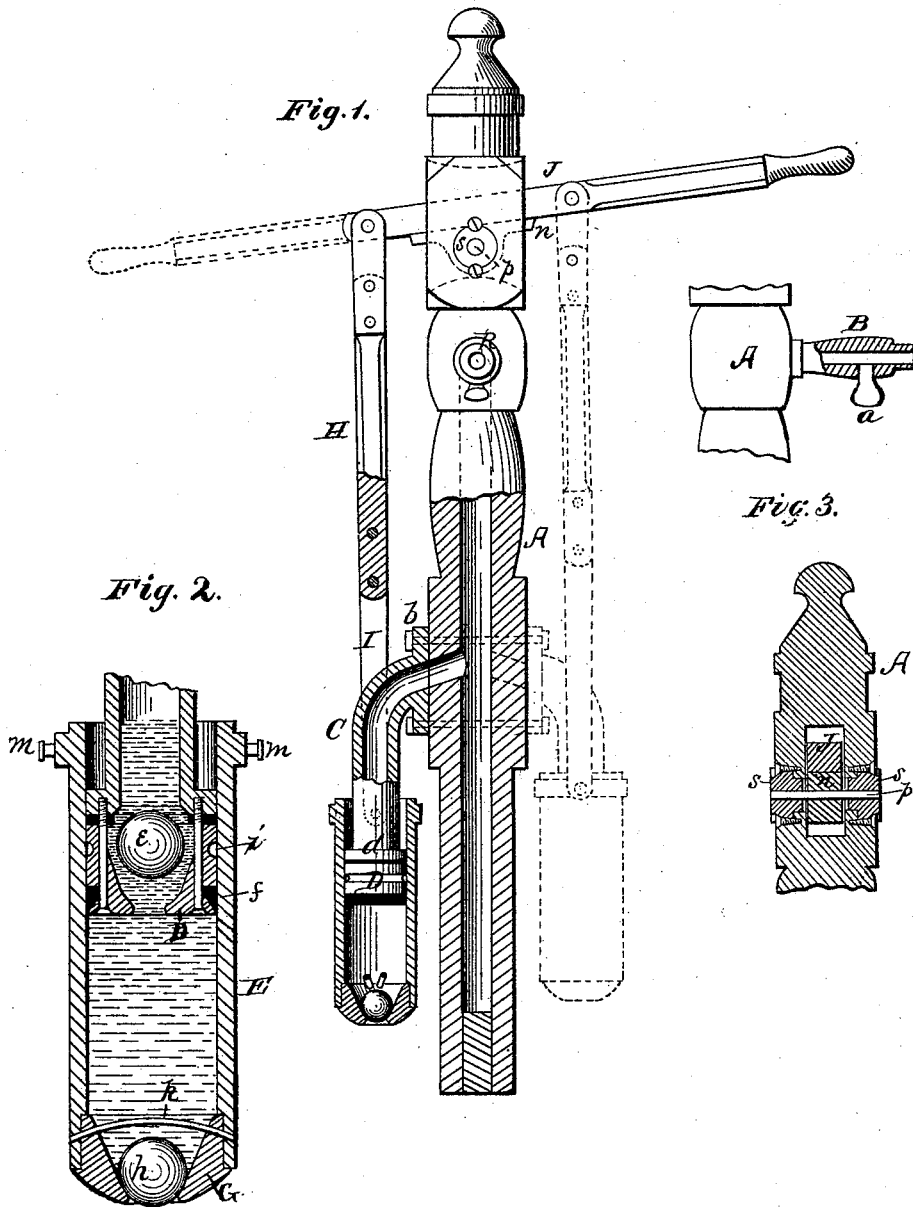


S. S. ROBINSON.  
PUMPS.

No. 180,375.

Patented July 25, 1876.



WITNESSES  
Henry W. Miller  
F. L. Curand

INVENTOR  
S. S. Robinson  
BY Alexander Mason  
Attorneys.

# UNITED STATES PATENT OFFICE.

SYLVANUS S. ROBINSON, OF HOLDEN, MISSOURI.

## IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **180,375**, dated July 25, 1876; application filed June 20, 1876.

*To all whom it may concern:*

Be it known that I, S. S. ROBINSON, of Holden, in the county of Johnson, and in the State of Missouri, have invented certain new and useful Improvements in Pumps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a pump, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section of my pump. Fig. 2 is an enlarged vertical section of the cylinder and piston. Fig. 3 is a cross-section through the handle.

A is the stock of the pump, closed at the lower end, and provided with a spout, B. This spout is open at its outer end, and has an opening in its under side, with a plug, *a*, to close either of these outlets, and let the water pass out through the other, as desired. C represents a curved pipe, formed with a flange, *b*, around its upper end, and fastened to the side of the stock A, a suitable aperture being made in the stock to form communication with the interior thereof. At the lower end of the pipe C is another flange, *d*, to which the plunger D is fastened by suitable bolts. The plunger D is made to form the seat for the ball-valve *e*, and has suitable leather packing *f*, as shown. It has also a circumferential groove, *i*, for water-packing. E represents the cylinder open at both ends, and provided at its lower end with the seat G for the ball-valve *h*, said seat fitting within the cylinder, and fastened thereto by one or more pins, *k*, which also form guards for the valve. The upper end of the cylinder E is

suspended by pins *m m* in the lower ends of two arms, I I, the upper ends of which are connected to a bar, H, and this bar connected to the handle J. This handle passes through a slot or mortise in the stock A, above the spout B, and is provided with a metal box, *n*, for the passage of the pivot-pin *p*, which rests in metal boxes *s s*, fastened in the pump-stock, thus taking all wear off from the wood. By working the handle the cylinder E is moved up and down on the stationary plunger D.

The pump may be made double-acting by adding on the opposite side of the pump-stock another pipe, C, with plunger D, and cylinder E with its connections, with the handle, as represented by dotted lines in Fig. 1.

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

1. The combination of the pump-stock A with spout B, the curved pipe C, provided with a flange, *b*, secured to the pump-stock, and having a stationary plunger, D, at its end, and the vertically-reciprocating open-end cylinder E, having a ball-valve, *h*, in its bottom, all constructed and arranged substantially as and for the purposes set forth.

2. The plunger D, constructed as described, with leather packing *f*, water-packing at *i*, and ball-valve *e*, and attached to the stationary pipe C, in combination with a vertically-reciprocating cylinder, substantially as and for the purposes herein set forth.

3. The combination, in a pump, of the mortised stock A, with metal boxes *s s*, handle J, with metal box *n*, and pin *p*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of May, 1876.

SYLVANUS S. ROBINSON.

Witnesses:

JESSE W. JAQUITH,  
WILLARD JAQUITH.