(No Model.) 2 Sheets—Sheet 1.

R. G. CONLEY.

PUMP.

No. 263,861. Patented Sept. 5, 1882.

Fig. 1.

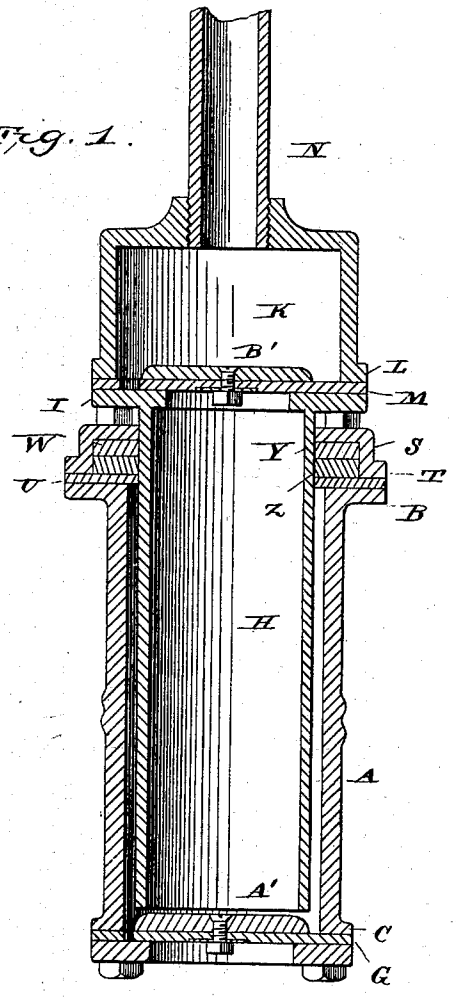


Fig. 2.

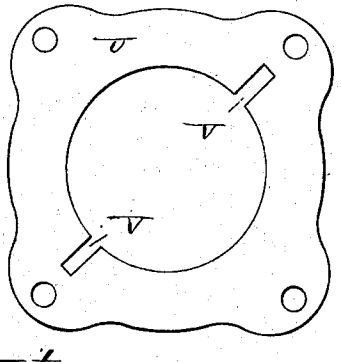
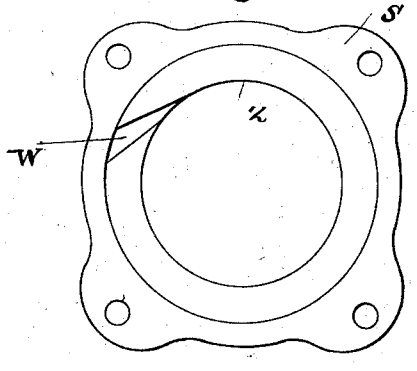


Fig. 3.



Witnesses.
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H. A. Toulmin.

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By C. M. Alexander, Atty.

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(No Model.)

2 Sheets—Sheet 2.

R. G. CONLEY.

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Fig. 4.

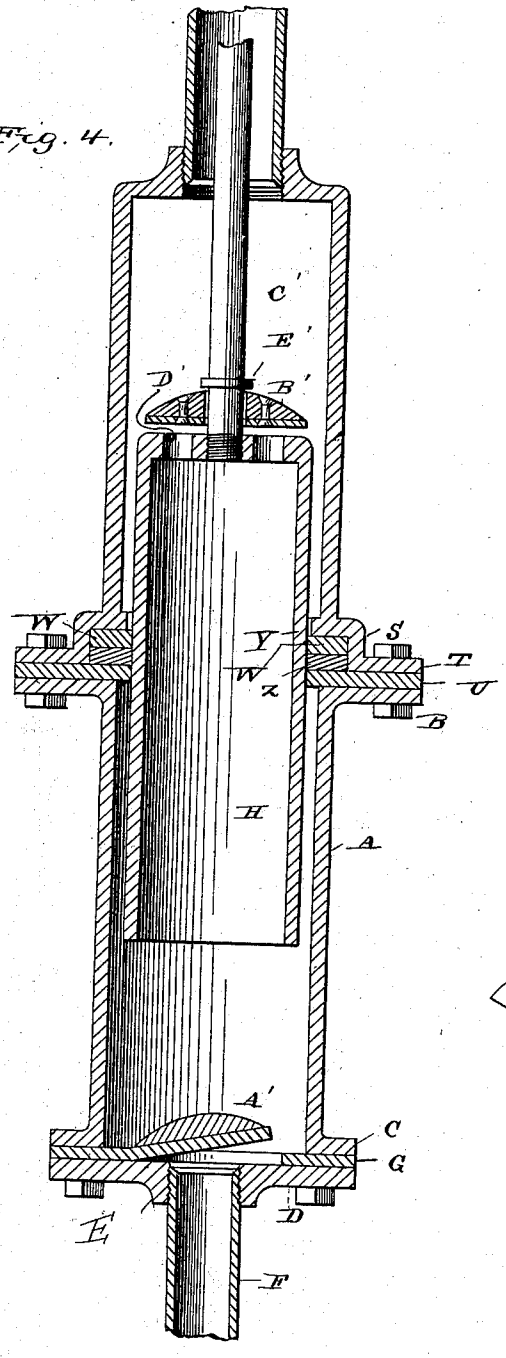


Fig. 5

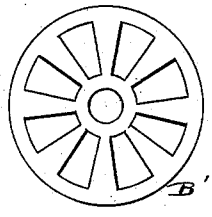
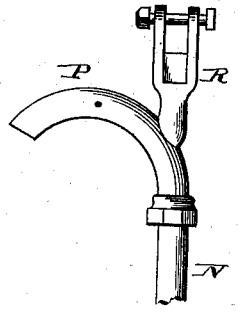


Fig. 6.



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UNITED STATES PATENT OFFICE.

ROBERT G. CONLEY, OF RICHMOND, INDIANA.

PUMP.

SPECIFICATION forming part of Letters Patent No. 263,861, dated September 5, 1882.

Application filed May 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT G. CONLEY, of Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Pumps; and I 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.

This invention has for its objects to provide a pump which may be used either as a submerged pump or a surface pump, as may be required; and it consists in certain new and improved combinations and arrangements of parts, as more fully hereinafter specified, and set forth in the claims.

In the drawings, Figure 1 represents a vertical sectional view of my improved pump. Fig. 2 represents a detached view of one of the packings employed in connection with the pump. Fig. 3 represents an inverted view of the top section of the pump-cylinder, showing the packing-ring located therein. Fig. 4 represents a longitudinal section of a pump, showing a modification of my invention. Fig. 5 represents a detached view of one of the valves; and Fig. 6 represents a detached view of the connection to which the pump lever is attached and a portion of the discharge-pipe.

The letter A indicates a cast-metal cylinder, having flanges at the top and bottom, as indicated by the letters B and C.

The letter D indicates a metallic disk, provided with a central screw-threaded boss, E, to which is secured an induction-pipe, F, to be employed when the pump is used as a surface-pump. The disk is secured to the lower flange of the pump-cylinder by means of screw-bolts, a leather or other washer, G, being interposed to make a tight joint.

The letter H indicates a hollow piston, which, as shown in Fig. 1, is provided with a flange, I, at its top, to which is secured a hollow metallic section or chamber, K, which has a flange, L, at its lower edge, and is secured to the flange of the piston by means of screw-bolts, an interposed washer, M, being employed to make a tight joint. From said section or chamber extends upward an eduction-pipe, N, which at its upper end is provided with a bent discharge-spout, P. (Shown in Fig. 6 of the drawings.) The said spout is provided with a bifurcated extension, R, to which the operating-lever is pivoted, the eduction-pipe serving as a reciprocating piston-rod.

The letter S indicates an annular recessed packing-section, provided with a flange, T, by means of which it may be secured by bolts or otherwise to the flange at the upper end of the pump-cylinder, and U a packing of leather or other similar material, slotted on opposite sides, as indicated by the letter V. In the recess in said packing-section indicated by the letter W are secured the split packing-rings Y Z, arranged so as to break joint and encircle the piston with an elastic pressure.

The letter A′ indicates a valve located in the lower part of the pump-cylinder, over the induction-port, which is adapted to open and close the same in the usual manner.

B′ indicates a valve located above the opening at the top of the hollow piston, adapted to open and close the said aperture as the piston is operated.

In the modification shown in Fig. 4 the upper chamber is attached directly to the flange of the pump-cylinder and incloses the upper portion of the hollow piston, which is provided with a solid piston-rod, C′, and is perforated at intervals D′ on top. The piston-rod is shouldered, as indicated by the letter E′, and has attached loosely to it the valve B′, adapted to play between such shoulder and its seat, on the top of the hollow piston.

The operation of my invention will be readily understood, in connection with the above, without further description.

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

1. In combination with the pump-cylinder and the hollow piston provided with valves, as described, the packing-chamber and split

packing-rings, and the packing located between the flanges B T, substantially as specified.

2. In combination with the pump-cylinder, the hollow piston, the packing and valves, arranged as described, the chamber inclosing the upper end of the hollow piston and valve, and the eduction-pipe, all arranged to operate substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 24th day of March, 1882.

ROBERT G. CONLEY.

Witnesses:
JOHN S. LYLE,
WILLIAM HERRMAN.