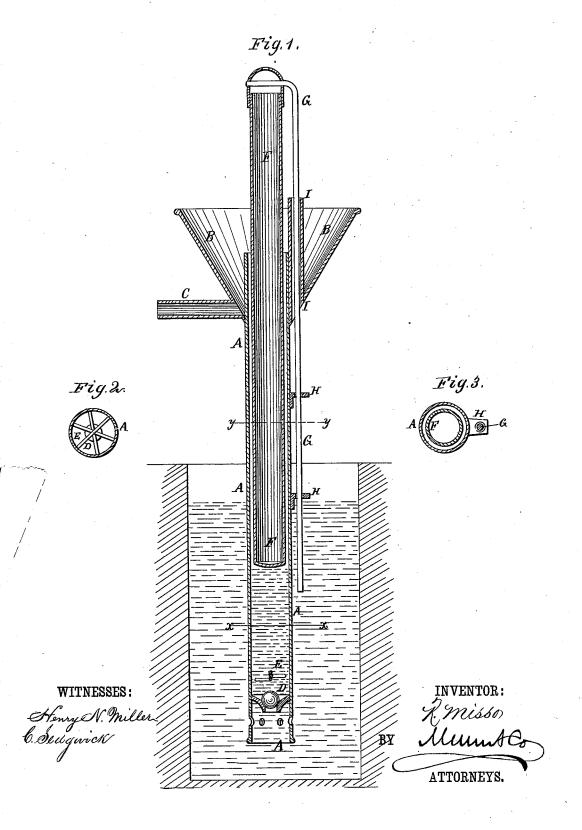
R. MISSO.
Pump.

No. 212,252.

Patented Feb. 11, 1879.



## UNITED STATES PATENT OFFICE.

ROCCO MISSO, OF MACON, MISSISSIPPI.

## IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 212,252, dated February 11. 1879; application filed November 19, 1878.

To all whom it may concern:

Be it known that I, Rocco Misso, of Macon, in the county of Noxubee and State of Mississippi, have invented a new and useful Improvement in Pumps, of which the follow-

ing is a specification:

Figure 1 is a vertical section of my improved pump. Fig. 2 is a cross-section of the same, taken through the line x x, Fig. 1. Fig. 3 is a cross-section of the same, taken through the line y y, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved pump for raising water, which shall be simple in construction and effective in operation.

The invention consists in an improved pump formed by the combination of the tube provided with the funnel, the spout, and the valve, the heavy cylinder, and the guide-rod and its brackets, with each other, as hereinafter fully described.

A is a tube, the end of which is inserted in the well or cistern from which the water is to be raised. The upper end of the tube A extends up to the place to which the water is to be raised. To the tube A, at a little distance from its upper end, is attached a funnel, B, from the lower part of which the discharge spout or nozzle C projects. In the sides of the lower end of the tube A are formed holes to admit water, and in the said tube, a little above the said holes, is secured a ball or drop valve, D. To the tube A, a little above the valve D, are attached cross rods or wires E, to prevent the ball of the valve D from being carried up too high by the water.

F is a tube or cylinder, closed at its lower end, and made a little smaller than the interior of the tube A, so that water can pass up between it and the walls of the said tube A. The cylinder F is made so heavy, or is so loaded, that its weight will cause it to sink through the water in the tube A, and cause the said water to rise into the funnel B and flow out through the spout C, the valve D preventing the said water from being forced out through the lower end of the tube A. As the cylinder F is again raised the water in the well or cistern forces the valve D open and rises until it stands at the same height in the tube A as in. the said well or cistern. The cylinder F is made to move up and down through the center of the tube A by a guard-rod, G, the upper end of which is rigidly attached to the upper end of the said cylinder F, and which passes down along the side of and parallel with the tube A. The guide-rod G slides up and down through guide-holes in brackets H, attached to the sides of the tube A, and through a guidetube, I, in the funnel B.

The cylinder F may be raised by a rope attached to its upper end, and passing over a pulley secured to some suitable support above it. The cylinder F may also be raised by a lever connected with its upper end, or with any convenient part of the rod G; or it may be raised by an apparatus similar to that which is used for raising the hammer of a pile-driver.

The apparatus for raising the cylinder F may be worked by hand, by steam, or by any other convenient power.

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

An improved pump formed by the combination of the tube A, provided with the funnel B, the spout C, and the valve D, the heavy cylinder F, and the guide-rod and brackets G H, with each other, substantially as herein shown and described.

ROCCO MISSO.

Witnesses: E. A. J. McHenry,

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