

P.B. and H.M.C. White's Improvement in Pumps

PATENTED

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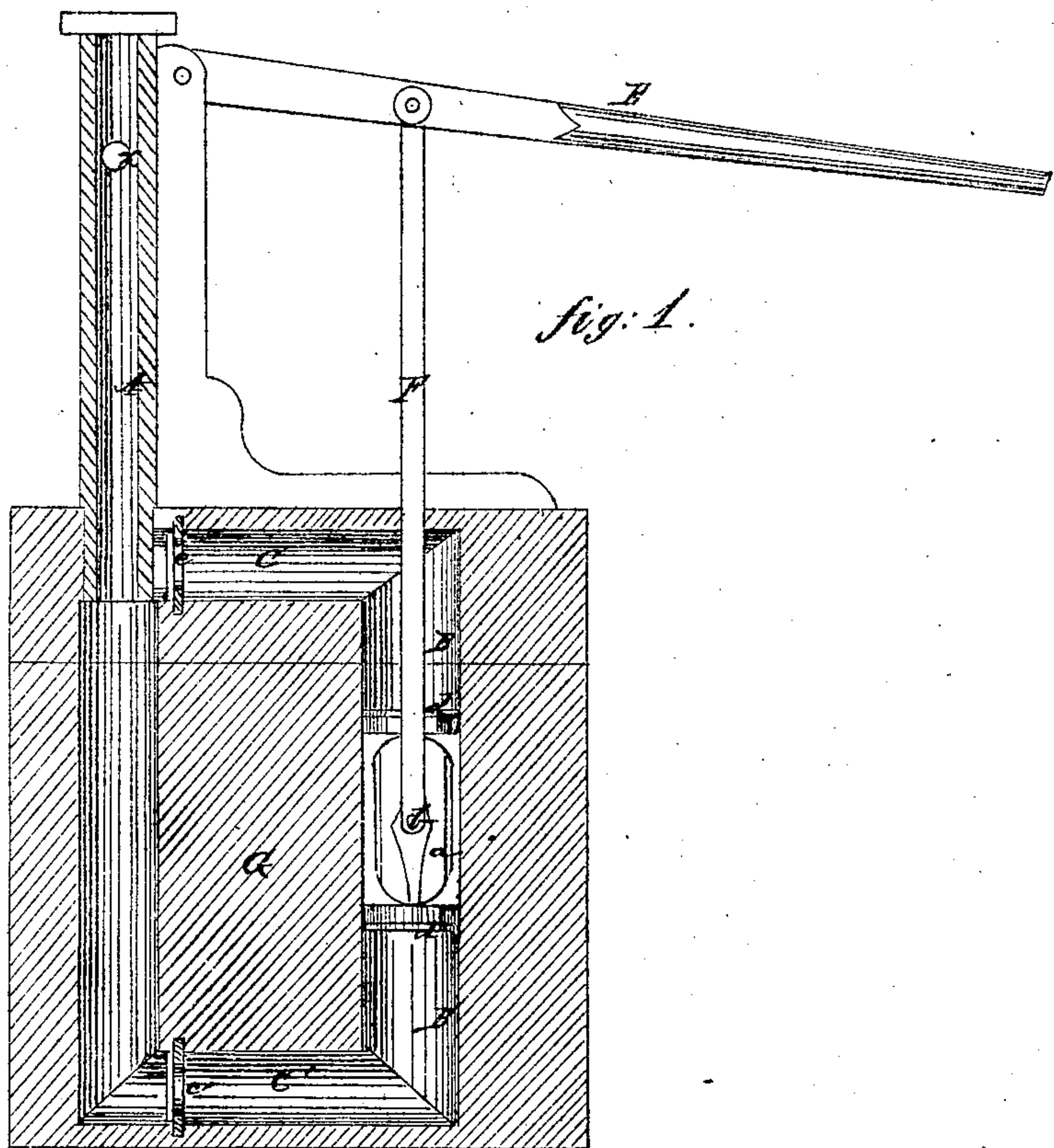


fig. 1.

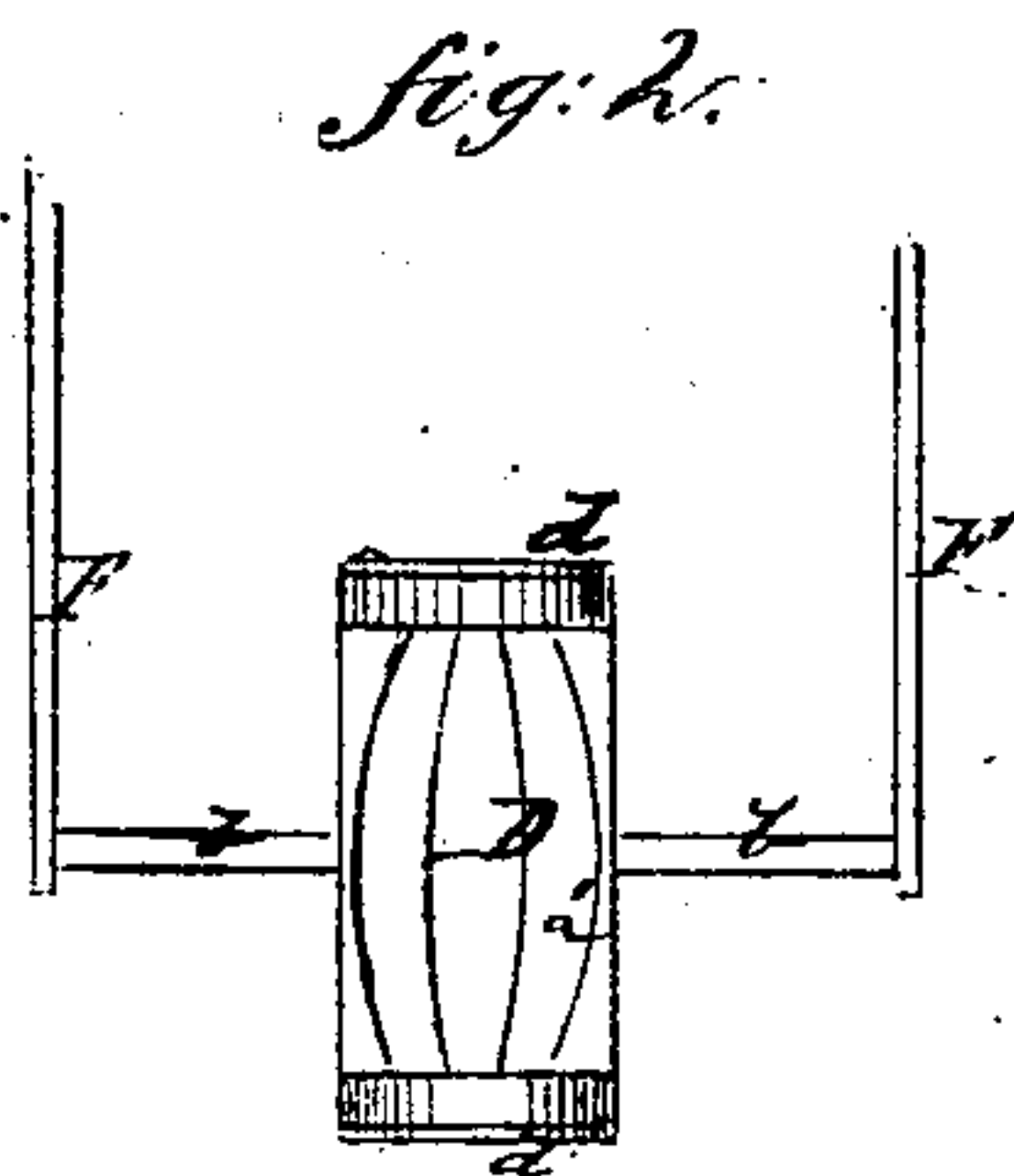


fig. 2.

Witnesses

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# United States Patent Office.

PHILO B. WHITE AND HENRY M. C. WHITE, OF DOWAGIAC, MICHIGAN.

*Letters Patent No. 75,228, dated March 3, 1868.*

## IMPROVEMENT IN PUMPS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, PHILO B. WHITE and HENRY M. C. WHITE, of Dowagiac, in the county of Cass, and in the State of Michigan, 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 the letters of reference marked thereon.

In the annexed drawings, making a part of this specification, A represents the vertical hollow shaft or stock of a pump provided with a mouth or discharge-pipe, *x*, and B represents a vertical pipe provided with an opening or slots, *a*, through opposite sides of it, and connected with the stock A by the horizontal pipes C C', which form an elbow at each end of the pipe B. The pipes C C' are each provided with a valve, *c* and *c'*, to check or keep the water from running or falling back after it is once forced into the stock A. D represents a plunger, which exactly fits and works inside of the pipe B, provided with openings or slots, *a'*, on both sides, to admit the water, and having valves *d* and *d'* at opposite ends; and E represents a lever pivoted at one end to the stock A, near its top, and having one end of the forked movable shaft F pivoted to it, the other end of the shaft F embracing the pipe B, and attached by the cross-bar *b*, which works in the slot *a*, to the plunger D, and works the same up and down by means of the lever E. It is obvious that the pipes C C' and B, and lower part of the stock A, may be enclosed in a box, G, of suitable dimensions, provided with slots in opposite sides to correspond with slots *a* in the pipe B, and thereby strengthened and secured more firmly together, or a box provided with channels and valves corresponding with the pipes B, C, and C', and lower part of the stock A, and the valves *c* and *c'* may be used in lieu of them. The box G or pipes C C' and B should be submerged in the water of a well or tank, and it will readily be seen that the water will pass through the slots *a* of the pipe B and the plunger D, and thence through the valves *d* and *d'* into the pipes C and C', and thence through the valves *c* and *c'* into the bottom part of the stock A.

When it is desired to pump or raise the water, by raising the lever E, and thereby the plunger D, the water above the valve *d* is forced forward through the valve *c* into the stock A, and kept from running back by the valves *c* and *c'*, and by pressing the lever E down, the water in front of the valve *d'* is forced forward, in like manner as above, through the pipe C' and the valve *c'* into the stock A. By a repetition of the movement of the lever E, the water is forced out of the mouth *x*, which may be at any given height above the water, in a continuous and uninterrupted stream.

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

The submerged box G, provided with a water-inlet in its side, channels B C C', valves *c c'*, slotted plunger D, with its valves *d d'*, said plunger operated by the lever E and shaft F, all substantially as and for the purposes set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 9th day of December, 1867.

PHILO B. WHITE,  
HENRY M. C. WHITE.

Witnesses:

J. J. VAN RIPER,  
JOSIAH SWISHER.