

Patented Mar 18, 1862.



Inventor:
H. M. Nye
By his Attorney
Thos H. Dodge

UNITED STATES PATENT OFFICE.

H. M. WYETH, OF PULASKI, IOWA.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 34,711, dated March 18, 1862.

To all whom it may concern:

Be it known that I, H. M. WYETH, of Pulaski, in the county of Davis and State of Iowa, have invented a certain new and useful Improvement in Pumps; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a side view of the pump, and Fig. 2 represents a longitudinal section.

In the accompanying drawings, A represents the piston box or chamber, which is made square or four-sided. The top B and bottom C are let into the sides, as indicated in the drawings.

D is the piston-head, which is also square to fit the interior of chamber or box A, and E is the piston-rod, made fast at the bottom to the piston-head D and extending up through the top B to any desired height.

The top B has an opening through it to admit water from above when the piston descends, and a valve *a* on its under side to close said opening when the piston rises. Bottom C has also an opening to admit water when the piston rises, and a valve *b* on its inner side to close said opening when the piston descends. When the piston-rod E and piston D rise from the position shown in Fig. 2, the upper valve *a* closes, as seen in the drawings, and the water escapes or is forced out of opening *d*, forcing the long valve *e* back against the discharge pipe or box F, as indicated in the drawings, when the water is forced up the channel or way *g* and out of the top of pipe F, which is to be made of any convenient height. On the descent of the piston the water below the same, and which entered through valve *b* as the piston was elevated, is prevented from passing out at the bottom by the closing of valve *b*. Consequently it is forced out of the opening *c* into the discharge-pipe F, and, rising, closes valve *e*, and continues up and out of pipe F through the channel or way *g*.

Pipe F may be made from a scantling or from boards first sawed or split into proper widths.

The valve *e* is so combined with the pump-box A and pipe F as to answer as a double valve, as will be readily understood by those skilled in the art from the drawings and the above description.

The construction of pipe F is very simple, and it can be fastened to the side of the piston-box A by nails or screws.

The piston-box A is made of boards or plank, and the construction of this is so simple that it can be constructed with great ease. The sides of the bottom of box A are cut out, as seen at *h*, to allow of the free passage of the water to the interior when the piston-rod is raised.

The size of box A will be governed by the views of the constructor.

The position of box A is to be at the bottom of the well or water to be raised, or at least so far immersed in the water that the top of box A will be always below the surface of the water, the rod E and pipe F extending to the proper height, so that the former can be operated in any convenient or well-known manner, while the latter discharges the water into any proper receptacle. Only three valves are used in this pump, and yet it is a double-acting force-pump.

The construction is so simple that any farmer can construct one with the tools usually found on his premises.

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

The combination and arrangement of the single side valve *e* with the pump box or chamber A, and discharge-pipe F, substantially as and for the purposes set forth.

In witness whereof I have hereunto subscribed by name.

H. M. WYETH.

In presence of—

AUGUSTUS S. PEARSON,
WILLIAM R. BRYCE.