

H. TYLER.

PUMP.

No. 174,878.

Patented March 14, 1876.

Fig. 1.

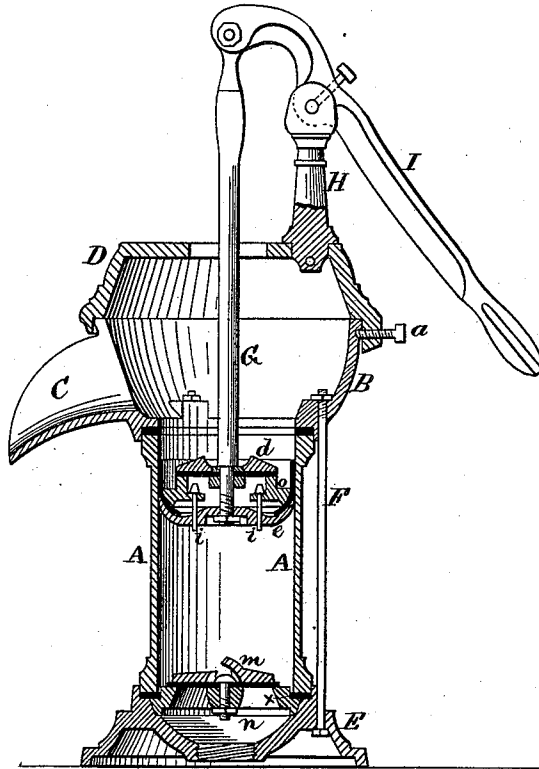
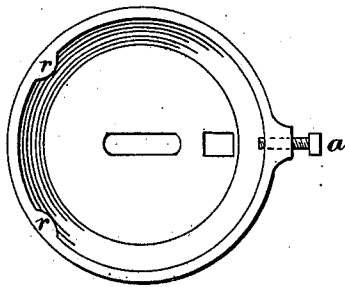


Fig. 2.



WITNESSES

Henry N. Miller By
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INVENTOR

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UNITED STATES PATENT OFFICE.

HIRAM TYLER, OF GENESEO, NEW YORK, ASSIGNOR OF TWO-THIRDS HIS
RIGHT TO UNDERHILL DANN AND HARVEY H. CURTISS, OF SAME PLACE.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **174,878**, dated March 14, 1876; application filed
December 14, 1875.

To all whom it may concern:

Be it known that I, HIRAM TYLER, of Geneseo, in the county of Livingston and in the State of New York, 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 and valves in the manner hereinafter more particularly described.

In the annexed drawings, making part of this specification, Figure 1 represents a longitudinal section, Fig. 2 a plan, of the under side of the cap.

In the figures, A represents the barrel of the pump, and B the bell-shaped movable-top, which has a spout, C, formed upon it. E and J represent differently-formed bottoms, either of which may be used according to the circumstances of the case, one being open and the other solid or closed on its under side. The barrel is connected to its top and its bottom pieces by means of screw-rods F.

When it is necessary for any purpose to take the pump to pieces it is only requisite to take the nuts from the connecting-rods, and the several parts may be at once disconnected.

D represents the cap of the pump, which is made dome-shaped, and provided upon its upper side with a standard, to which the handle I is pivoted or hinged. This cap is provided with two short lugs or flanges, *r r*, which catch under a flange upon the upper edge of the top B, and, together with a set-screw, *a*, which also catches under the same flange, serve to secure or form a fastening for said cap to the top. G represents the pump-rod, to the lower end of which is secured the upper bucket, which is composed of an open metallic frame, *o*, and one marked *e*. These frames compress and hold between them the usual leather-disk packing. The frame *o* is beveled from its outer edge inward and downward, while the frame *e* has its inner surface near its edge curved upward to correspond

with the shape of frame *o*, whereby the leather is held in proper shape. *d d* represent two valves upon this bucket. They are both hinged near the center of the frame *o*, and both open at their outer edges upward, and thus form or allow of the most water-space possible. Upon the frame *o*, on its under side, are two flanges, through which holes are made to receive the headed loose pins *i i*. These pins pass through holes in the frame *e*, and project below it.

The object of these pins is to open the valve *d* when this bucket is lowered, so that they will strike against the lower bucket with their lower ends, their heads at the same time striking the under side of the valves.

The lower bucket, which is stationary, is formed in a somewhat-similar manner, *x* being the upper frame, and *n* the lower one, the two being confined together by a screw-bolt. The valves *m* are provided upon their upper sides with stems, which are inclined in such a manner that when the upper bucket descends far enough, and strikes said stems, they open the valves for the purpose of allowing the water to escape.

It will thus be seen that both sets of valves are opened in each bucket simultaneously, and that the water is thus allowed to escape.

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

1. The frame *o*, provided with interior flange, through which are passed the headed loose pins *i i*, in combination with the frame *e*, the packing interposed between the frames *o e*, and the hinged valves *d d*, all secured on the rod G, substantially as and for the purposes herein set forth.

2. The cap D, provided with flanges *r r*, and set-screw *a*, in combination with the top B, and its rim, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 15th day of November, 1875.

HIRAM TYLER. [L. S.]

Witnesses:

UNDERHILL DANN,
JAMES J. CONE.