

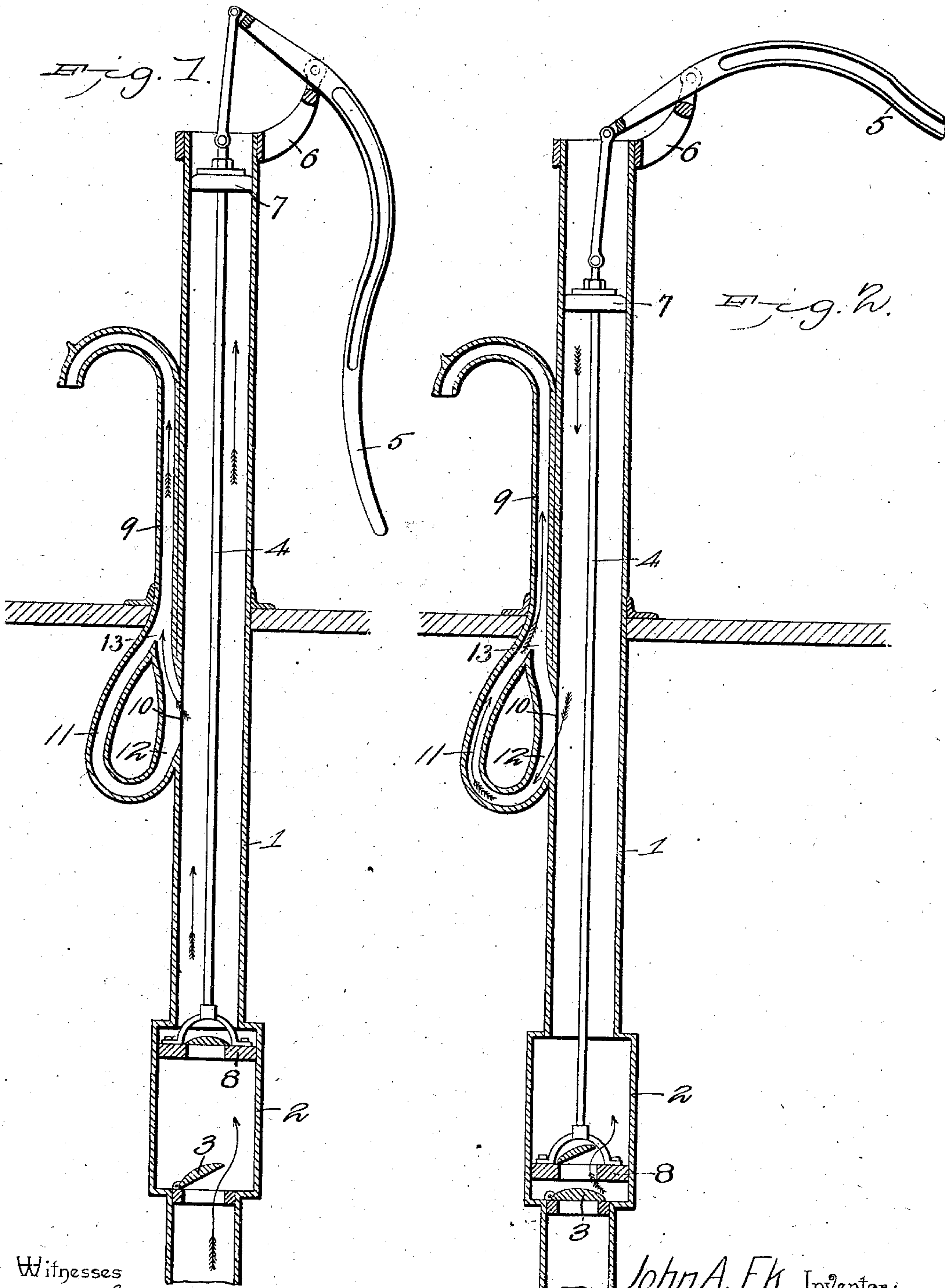
No. 724,559.

PATENTED APR. 7, 1903.

J. A. EK.
PUMP.

APPLICATION FILED DEC. 16, 1902.

NO MODEL



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN AUGUST EK, OF PHILLIPS, WISCONSIN.

PUMP.

SPECIFICATION forming part of Letters Patent No. 724,559, dated April 7, 1903.

Application filed December 16, 1902. Serial No. 135,405. (No model.)

To all whom it may concern:

Be it known that I, JOHN AUGUST EK, a citizen of the United States, residing at Phillips, in the county of Price and State of Wisconsin, have invented a new and useful Pump, of which the following is a specification.

My invention relates to force-pumps, and has for its objects to produce a device of this character which will be comparatively simple of construction, inexpensive to manufacture, efficient in operation, and one in which a continuous flow of water will be maintained during the operation of the device.

To these ends the invention comprises, in a pump, the combination, with a stand-pipe, of a discharge-spout connected therewith and provided with two conduits, a plunger-rod mounted for operation in the stand-pipe and provided with two plungers, one above and the other below the spout, and means for operating the plunger-rod.

The invention further comprises the details of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a sectional elevation of the device, illustrating its action with the plungers raised. Fig. 2 is a similar view illustrating the action of the device with the plungers depressed.

Referring to the drawings, 1 indicates a stand-pipe provided with a chamber 2, closed at its lower end by a check-valve 3.

4 indicates a plunger-rod mounted for operation in the stand-pipe and provided with the usual operating-handle 5, pivoted in bearings 6.

7 and 8 indicate two valves or plungers mounted upon the plunger-rod, the plunger 8 being located in the chamber 2 for operation therein and the plunger 7 being situated near the upper end of the stand-pipe for the purpose to be presently explained.

9 indicates a discharge-spout connected with the stand-pipe in any suitable manner and communicating therewith by means of an opening 10. This spout is provided with two conduits 11 and 12, which conduct the water from the stand-pipe to the discharge portion of the spout. These conduits may be formed in any suitable manner; but I prefer to form the same by bending the lower extended end of the spout back upon itself and

connecting it with the main body of the spout, as at 13. The opening 10, formed in the wall of the stand-pipe, is common to both of the spout-conduits. The plungers 7 and 8 are situated in the pipe, respectively, above and below the discharge-spout. The end of the discharge-spout may be screw-threaded in the usual manner for the reception of hose or the like.

The operation of the device is as follows: When the handle 5 is operated, it reciprocates the plunger-rod 4 in the stand-pipe, and upon the upward movement of the rod the valve 8 serves to lift the water and force the same upward through the conduit 12 of the discharge-spout, while the downward movement of the rod causes the plunger 7 to force the water downward into the conduit 11 of the discharge-spout. Thus it will be seen that a continuous flow of water from the discharge-spout is maintained during the operation of the device. The valve 3 permits the water to be drawn upward through the stand-pipe, but prevents it being forced downward through the same, as usual in devices of this character.

From the foregoing it will be seen that I produce a device which is simple in construction, efficient in operation, and is comparatively inexpensive to manufacture and that by my construction I maintain a continuous flow of water from the pump throughout its operation. In attaining these ends I do not limit or confine myself to the precise details herein shown and described, inasmuch as such changes as would suggest themselves to the skilled mechanic may be made therein without departing from the spirit or scope of my invention.

Having thus described my invention, what I claim is—

In a pump, the combination with a stand-pipe, of a discharge-spout bent backward upon itself at its lower end to form two conduits connecting the spout and stand-pipe, one of said conduits extending upward and the other downward from their point of connection with the pipe, a plunger-rod mounted in the stand-pipe and provided with two plungers, one above and the other below the spout, and means for operating the plunger-rod, the upper plunger adapted, when the rod is oper-

ated, to force the water through the down-
wardly-extending conduit and the lower plun-
ger to force the water through the upwardly-
extending conduit; whereby a continuous
5 flow of water from the spout is maintained
during the operation of the device.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in
the presence of two witnesses.

JOHN AUGUST EK.

Witnesses:

ALEX. RASMUSSEN,

JOHN J. LANSWORTH.