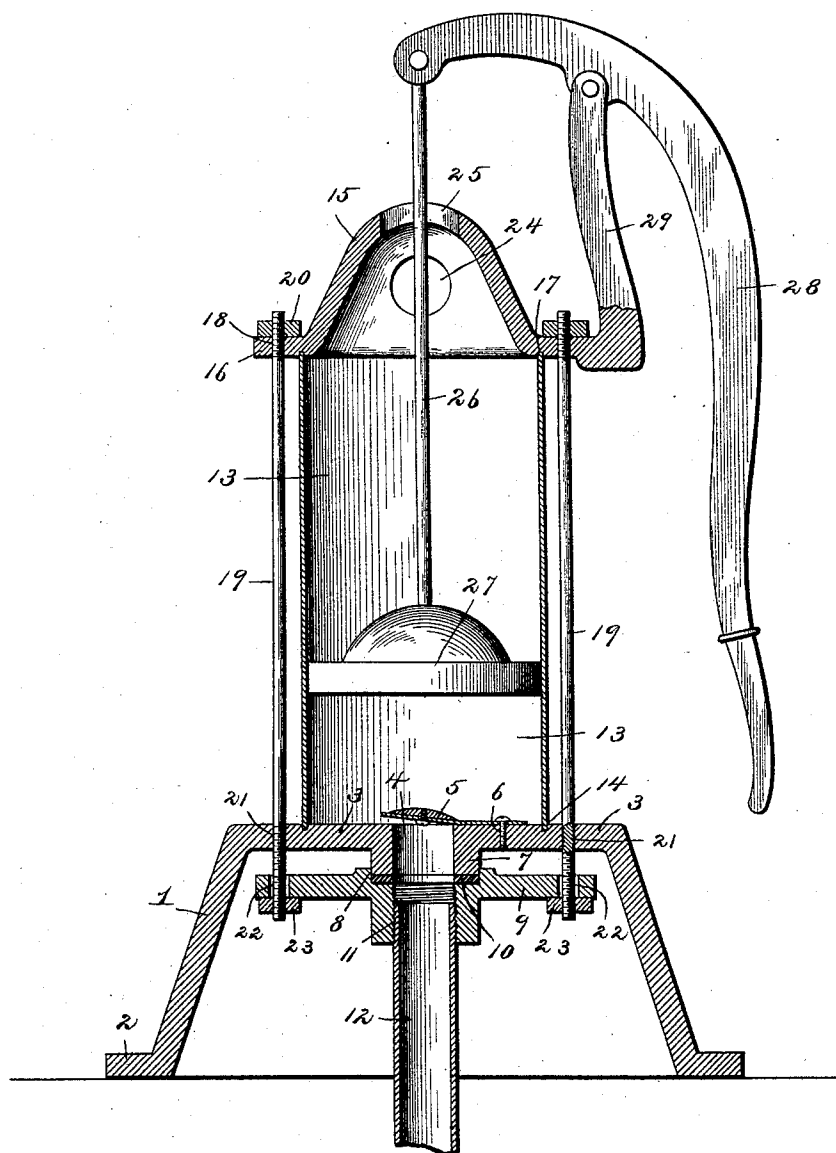


(No Model.)

P. E. WISTRAND.
LIFT PUMP.

No. 533,517.

Patented Feb. 5, 1895.



Inventor.

Peter E. Wistrand.

Witnesses

Harry L. Ames.

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UNITED STATES PATENT OFFICE.

PETER E. WISTRAND, OF KEWANEE, ILLINOIS.

LIFT-PUMP.

SPECIFICATION forming part of Letters Patent No. 533,517, dated February 5, 1895.

Application filed September 25, 1894. Serial No. 524,102. (No model.)

To all whom it may concern:

Be it known that I, PETER E. WISTRAND, a citizen of the United States, residing at Kewanee, in the county of Henry and State of Illinois, have invented a new and useful Lift-Pump, of which the following is a specification.

This invention relates to lift pumps; and it has for its object to effect certain improvements in pumps of this character that are especially adapted for use in connection with cisterns, and to this end the invention contemplates a construction of pump, the several parts of which are assembled together by the same fastening means, thereby providing a simple, strong and efficient construction of pump.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the drawing the figure is a central vertical sectional view of a lift pump constructed in accordance with this invention.

Referring to the drawing, 1 designates a square supporting base having a lower flanged end 2, adapted to rest on a floor or other suitable support. The said squared supporting base 1, is further provided with a flat top portion 3, having a central valve opening 4, over which works a weighted leather flap valve 5, that is secured as at 6, to the said supporting base, and depending centrally from the flat top portion 3, of the said base is the inlet neck 7, that is adapted to be received in the circular neck seat 8, formed centrally within the top of the removable nipple plate 9. The central top neck seat 8, of the nipple plate 9, also receives therein a gasket 10, that forms a water tight connection between the neck 7, and the plate 9, and said plate 9, is provided with a central depending interiorly threaded nipple 11, into which is fitted the upper exteriorly threaded end of the suction pipe 12, that leads from the cistern or well to carry the water into the cylinder 13. The pump cylinder 13, is mounted on top of the base 1, and the lower end of said cylinder fits in the circular groove 14, formed in the flat

top 3, of the base, which top portion 3, of the base forms the lower cylinder cap or head.

The upper end of the pump cylinder 3, has removably fitted thereon the upper dome-shaped cylinder cap 15, provided at its lower edge with the clamp flange 16, having in its lower face a circular groove 17, to fit the upper end of the cylinder and with the rod openings 18, to receive the upper threaded ends of the tie-rods 19, arranged outside of the cylinder. Above the flange 16, the upper ends of the rods 19, are engaged by the clamp nuts 20, and the lower threaded ends of said rods pass through the threaded openings 21, in the top of the base 1, and also through the rod openings 22 formed in the nipple plate 9 near the edges thereof. The lower extremities of the said tie-rods are engaged by the lower clamp nuts 23, that screw against the lower side of the plate 9, thereby completing a fastening device that clamps the nipple plate 9, in position, the cylinder onto the base, and the upper cylinder cap on top of the cylinder.

The upper cylinder cap 15, is provided in one side with a spout opening 24, and in the top with the slot 25, to accommodate the movement of the reciprocating plunger rod 26, to the lower end of which is connected an ordinary valved plunger 27 working in the cylinder. The upper end of the rod 26, is pivotally connected to one end of the pump handle 28, mounted on the upper end of the bracket arm 29, extended from one side of the upper cylinder cap 15.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

In a lift pump, the combination of a squared base provided with a flat top having a circular groove therein, a series of threaded openings, and a central depending straight inlet neck, a cylinder resting at its lower end in the circular groove of said base, which forms the lower cap therefor, an upper cylinder cap provided with a clamp flange having a series of rod openings, and in its lower face a circular groove to fit the upper end of the cylinder, a nipple plate arranged below the top of the base and provided with a central depending interiorly threaded nipple, a circular neck seat at the upper end of the nipple to receive

the lower edge of said inlet neck, and a series
of rod openings near its edge, a gasket ar-
ranged within said seat neck between the
nipple plate and the inlet neck, a series of
5 tie rods bolted respectively at their upper and
lower ends in the rod openings of the clamp
flange and of the nipple plate, the lower
threaded ends of said rods also engaging the
threaded openings in the top of the base, the
10 bottom flap valve secured on the top of the

base, and the plunger moving within the cyl-
inder, substantially as set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

P. E. WISTRAND.

Witnesses:

JOHN H. SIGGERS,
HAROLD H. SIMMS.