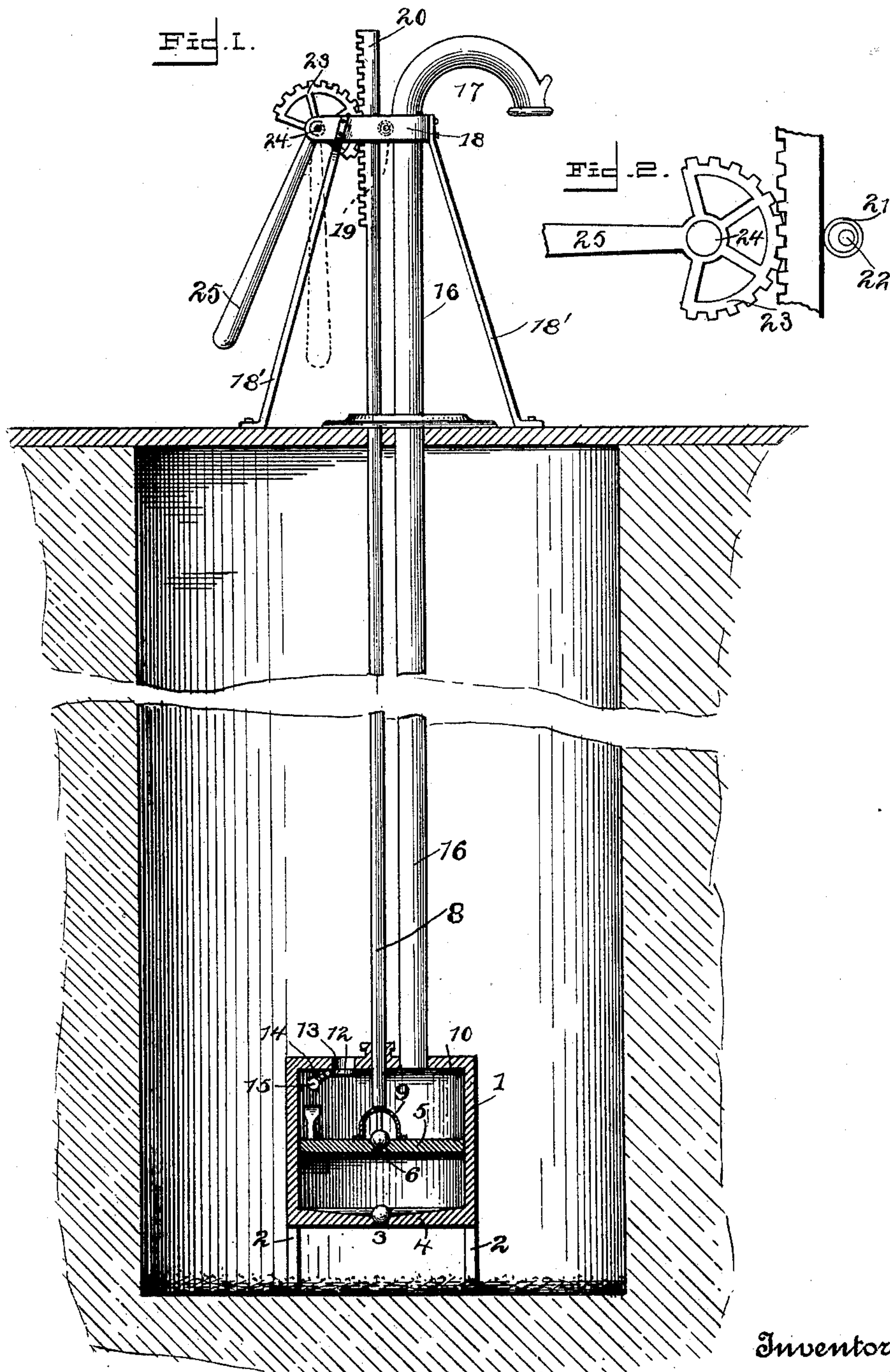


(No Model.)

J. LOCKWOOD  
PUMP.

No. 592,570.

Patented Oct. 26, 1897.



Witnesses:

*Fenton S. Belt.*  
*J. A. Billson.*

Inventor:

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Attorney



# UNITED STATES PATENT OFFICE.

JEREMIAH LOCKWOOD, OF SULLIVAN, INDIANA.

## PUMP.

SPECIFICATION forming part of Letters Patent No. 592,570, dated October 26, 1897.

Application filed March 22, 1897. Serial No. 628,723. (No model.)

*To all whom it may concern:*

Be it known that I, JEREMIAH LOCKWOOD, a citizen of the United States, residing at Sullivan, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Pumps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to force or lift pumps for wells, cisterns, and the like, and the object is to produce a pump of this class which shall be simple in operation and inexpensive in construction; and to these ends the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a vertical section of my improved pump, and Fig. 2 is a detail view.

1 represents the pump-cylinder, mounted on the legs 2, 2, and 3 is an ordinary ball-valve located in the bottom 4 of said cylinder.

5 represents the plunger or piston, which is provided with an ordinary ball-valve 6. The upper face of the bottom 4 is conically inclined toward the valve-seat to facilitate the seating of the valve by gravity.

8 represents the cylindrical piston-rod, its lower end connected by a bracket 9 to the piston.

10 represents the closed top of the pump-cylinder, and it is provided with a valve 12, covering an orifice 13, and having a diagonal arm 14, provided with a weight 15, which normally holds said valve closed.

16 is the discharge-spout, its upper end terminating in the gooseneck 17.

18 represents a horizontal bracket having the diagonal foot-braces 18', which forms a support for the discharge-spout, and it is provided with a rectangular orifice 19, forming a guide for the rack 20, which constitutes the upper end of the piston-rod.

21 represents a friction-sleeve mounted on the cylindrical body of the bolt 22, eccentrically mounted in the bracket 18, and said sleeve

forms an adjustable bearing for the plane back of the rack.

23 represents a segmental gear-wheel journaled on a bolt 24 in the bracket 18 and having its teeth in mesh with the teeth on the rack 20.

25 represents the pump-handle, fixed to segmental gear-wheel, and when said handle is vertically reciprocated the gear 23 is oscillated and the piston reciprocated in the pump-cylinder, which raises the water in the usual well-known manner.

In the ordinary manipulation of the piston its upper end does not come in contact with the arm 14 of the valve 12; but if the handle be moved downward to the full limit of its stroke it raises the piston against the arm 14 and opens the valve 12, so as to let the column of water in the discharge-pipe flow back into the well and thereby prevent the danger of freezing in the pipe.

Although I have specifically described the construction and relative arrangements of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

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

A pump comprising the discharge-pipe 16, the cylinder 1 connected to the lower end thereof and provided with the inlet-valve 3 and the outlet-valve 12, the piston 5 provided with the valve 6, and the piston-rod 8 having its upper end terminating in the rack-bar 20, in combination with the bracket 18, the segmental gear-wheel 23 journaled in said bracket and in operative connection with said rack, and provided with the handle 25 and the friction-sleeve 21 eccentrically mounted in said bracket to form an adjustable bearing for the rack-bar, whereby the wear on the gear and rack may be taken up, as and for the purpose set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JEREMIAH LOCKWOOD.

Witnesses:

SAM. H. ALKERE,  
W. H. H. HILL.