

(No Model.)

L. M. RICH.  
PUMP BUCKET.

No. 265,869.

Patented Oct. 10, 1882.

Fig. 1.

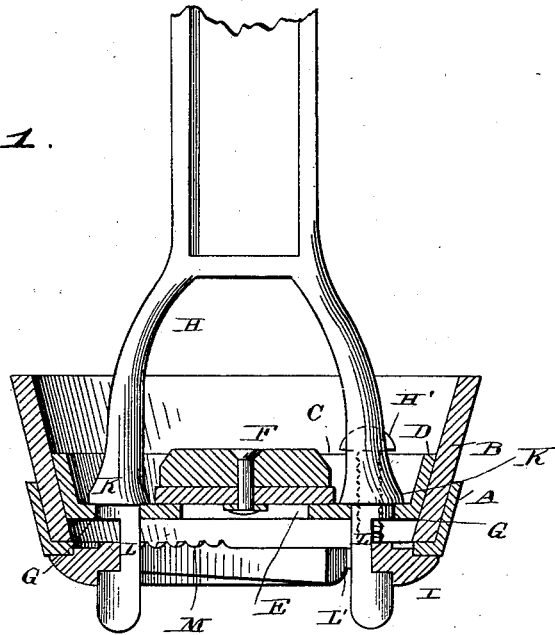


Fig. 2.

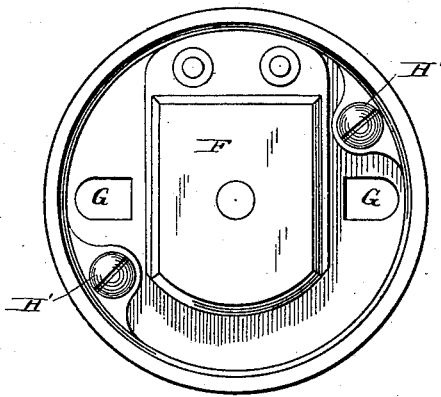
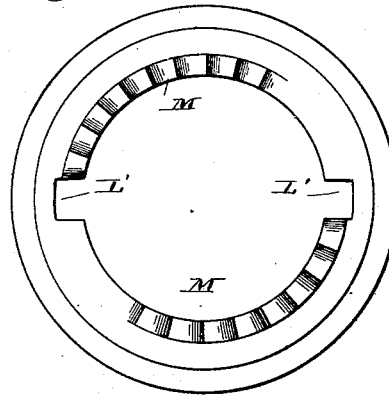


Fig. 3.



Witnesses,

Edwin L. Jewell.  
J. J. McCarthy.

Inventor,

Lester M. Rich,  
By C. M. Alexander.  
Attorney

# UNITED STATES PATENT OFFICE.

LESTER M. RICH, OF CEDAR RAPIDS, IOWA.

## PUMP-BUCKET.

SPECIFICATION forming part of Letters Patent No. 265,869, dated October 10, 1882.

Application filed July 25, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, LESTER M. RICH, of Cedar Rapids, in the county of Linn, and in the State of Iowa, have invented certain new and useful Improvements in Pump-Buckets; and I 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.

This invention relates to certain improvements in pump-buckets; and it has for its objects to provide improved means for securing the packing to the bucket-frame, as will more fully hereinafter appear. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a view, partly in section and partly in elevation, of my invention; Fig. 2, a top view of the bucket with the pump-rod removed, and Fig. 3 a bottom view of a portion of the bucket-frame.

The letter A indicates an annulus, constructed of cast metal or other suitable material. The said annulus has flaring sides, and is provided with a seat on the inside, at the bottom, against which the lower edge of the packing B rests.

The letter C indicates a valve-disk, which has a flaring rim, D, which is designed to be parallel with the flaring sides of the annulus before mentioned. The said valve-disk is provided with a central opening, E, and a flap-valve, F, of the ordinary construction. The said valve-disk is provided with diametrically-opposite apertures G, through which are adapted to pass the arms of the bifurcated portion H of the pump-rod. The said disk is also provided with diametrically-opposite screw-threaded apertures, through which pass the screws A', the lower ends of which are adapted to bear against a lower annulus, I, as indicated in Fig. 1. The bifurcated portion of the pump-rod is shouldered, as indicated by the letter K, and the parts below such shoulders are recessed, as indicated by the letter L. The lower annulus is recessed on diametrically-opposite sides, as indicated by the letter L', and is provided with inclined walls, which are adapted to engage the recesses in the bifur-

cated portion of the pump-rod, as more fully hereinafter specified. The said annulus I is also provided with corrugations M, in which the screws before mentioned are adapted to bear.

In securing the parts of my improved device together the packing is placed inside of the flaring rim of the first-mentioned annulus and the valve-disk is placed inside the packing. The lower annulus is then placed against the bottom of the first-mentioned annulus, the bifurcated portion of the pump-rod is passed through the apertures in the valve-disk and through the recesses in the lower annulus, and the said annulus is turned so as to bind the parts together. When thus properly secured the screws are tightened to prevent any possibility of the parts shifting.

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

1. The combination, with the annulus having a flaring rim, of the valve-disk having a parallel rim and diametrically-opposite openings, the lower annulus provided with recesses and inclined walls and the bifurcated shouldered and recessed portion of the pump-rod, all arranged to be secured together, substantially as and for the purposes specified.

2. In combination with the upper and lower annuli and the bifurcated pump-rod, adapted to be secured together, as described, the set-screws adapted to bear in corrugations on the lower annulus, substantially as and for the purposes set forth.

3. In a pump-bucket, the combination, with the upper annulus, against which the packing rests, of the lower annulus having inclined lower walls or cams and suitable fastening devices whereby it may be secured to the upper annulus, substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 6th day of June, 1882.

LESTER M. RICH.

Witnesses:

J. M. MAY,  
T. C. MUNGER.