J. S. MANLEY.

Endless Chain Pump Bucket.

No. 167,919. Patented Sept. 21, 1875.

Fig: 1.

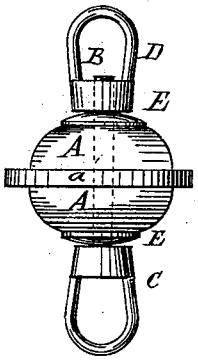
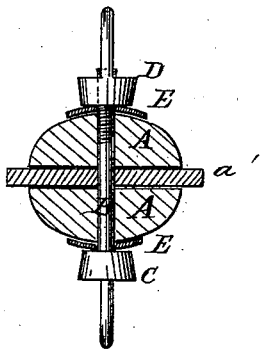


Fig: 2.



WITNESSES:

Chas. Kida.
A. F. Terry

INVENTOR:

J. S. Manley
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JARED S. MANLEY, OF CANTON, PENNSYLVANIA.

IMPROVEMENT IN ENDLESS-CHAIN-PUMP BUCKETS.

Specification forming part of Letters Patent No. **167,919**, dated September 21, 1875; application filed July 17, 1875.

To all whom it may concern:

Be it known that I, JARED S. MANLEY, of Canton, in the county of Bradford and State of Pennsylvania, have invented a new and useful Improvement in Endless-Chain-Pump Bucket, of which the following is a specification:

Figure 1 is a side view of my improved bucket. Fig. 2 is a detail section of the same.

Similar letters of reference indicate corresponding parts.

The invention relates to the construction of the bucket, whereby it is adapted for use in different-sized well-tubes, as hereinafter described.

A is a rubber ball of such a size as to readily pass through the pump-tube, and which is provided with a ring-flange, *a'*, around its middle part. I make the flanged ball of three parts, so that the central circular disk may be clamped between the hemispherical parts A A, and also readily detached when worn. B is a bolt passed through a hole formed through the center of the bucket A *a'* at right angles with the flange *a'*. To one end of the bolt B is swiveled a link, C, and upon its other end is screwed a nut-link, D, washers E being interposed between the said bucket A *a'* and the said links C. D. With this construction, when the bucket A *a'* is drawn into and through the pump-tube the flange *a'* is pressed back, and its elasticity keeps it pressed against the inner surface of said tube, so that the water cannot flow past it, and so that it may conform itself to any inequalities in the inner surface of said tube. A hole may be formed through the flange *a'*, to allow the water to flow out of the tube, when the pump is allowed to stand. The series of buckets A *a'* may be connected by a chain or other suitable connection.

I am aware that it is not new to use a rubber ball with looped wire inside and two holes through it, or to employ swiveled loops with a hollow rubber ball; but

What I claim is—

The combination of two corresponding pieces A A and intermediate disk *a'* with clamp B C D, as and for the purpose specified.

JARED SYLVESTER MANLEY.

Witnesses:

E. L. MANLEY,

J. A. HOOPER.