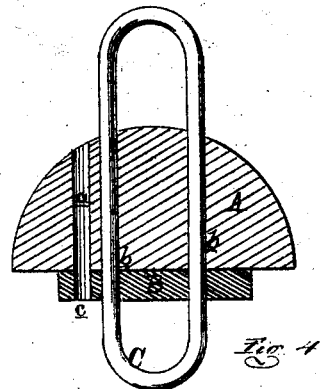
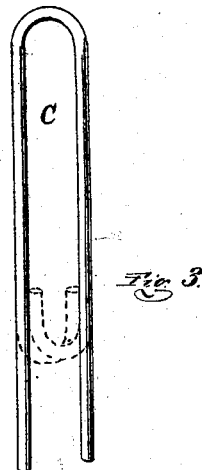
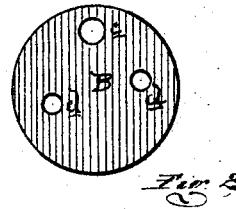
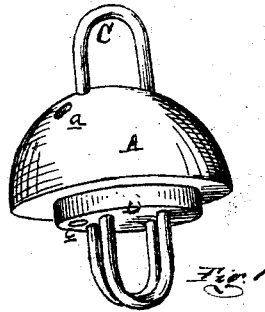


W. C. BARKER.

Improvement in Buckets for Chain-Pumps.

No. 116,138.

Patented June 20, 1871.



ATTEST

Myron H. Church  
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INVENTOR

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# UNITED STATES PATENT OFFICE.

WILLIAM C. BARKER, OF YPSILANTI, MICHIGAN.

## IMPROVEMENT IN BUCKETS FOR CHAIN-PUMPS.

Specification forming part of Letters Patent No. 116,138, dated June 20, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM C. BARKER, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Improvement in Buckets for Chain-Pumps; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of my bucket with its loop and button. Fig. 2 is a plan view of the button. Fig. 3 is a plan of the loop before insertion through the bucket and button, and in dotted lines is shown how the lower ends of the loop are bent up after insertion to form a rest for the button, which in turn forms a rest or support for the bucket. Fig. 4 is a vertical section of the bucket, showing the holes through which the loop is inserted and the drip-hole, through which any water left standing in the pump-tube above the bucket will drip when the pump is not in use.

Like letters refer to like parts in each figure.

The nature of this invention relates to an improved construction of elastic buckets for chain-pumps which will not be as expensive as those now in use, and which will allow the water in the tube to pass down to the source of supply when the pump is not in use, thereby preventing any liability or danger of its freezing up in cold weather. The invention consists, first, in a hemispherical elastic bucket provided with a small hole through it for the purpose of allowing the water in the tube above it to drip out of the tube, and also provided with other proper holes, through which the loop-link is inserted, and arranged for drawing water with the spherical side uppermost; second, in the combination of the buckets, button, and loop-link, when each part is constructed and arranged as more fully hereinafter set forth.

In the accompanying drawing, A represents a hemispherically-shaped bucket made of rubber or any other similarly-elastic material. The convex side of this bucket is the upper one, and the bucket in its largest circumference should be considerably larger than the bore

of the pump-tube, as its flexibility and elasticity will readily allow it to be drawn upward through the tube, while, at the same time, if by any accident the operator releases his hold of the crank over which the chain runs, the bucket will not drop in the tube, but will remain where the accident left it; or, in other words, the shape, as shown, together with the fact that its largest circumference is at its base, will readily allow it to be drawn upward in the tube, and prevent its being drawn downward or forced in the latter direction by the weight of water above it. Through this bucket is a small aperture, *a*, through which any water above the bucket in the tube may drip when the bucket is stationary, for the purpose hereinbefore mentioned. There are two other apertures, *b*, through said bucket, for the purposes hereinafter described. A button or washer, B, is made of leather or any other suitable material, and is provided with apertures *c* *d*, the former corresponding to the aperture *a* in the elastic bucket, and the latter corresponding to the apertures *b*, and for like purposes. C is a loop-link, made in the form of an inverted letter U. The open ends of this loop are passed through the apertures *b* in the bucket and the corresponding apertures *d* in the button, care being taken that the apertures *a* in the bucket and *c* in the button are coincident with each other. Each of the loose ends of the loop are then bent inward and upward until they rest against the lower side of the button, thereby holding the same in place and forming loops above and below the bucket, by means of which to attach the same to the links of the chain.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The semi-spherical elastic bucket A, provided with apertures *a* *b*, arranged, when drawing water, with the spherical part uppermost, as described and shown.

2. The combination of the bucket A, provided with leak-holes *a*, the washer or button B, and loop-link C, when each is constructed and arranged to operate as set forth.

Witnesses: WILLIAM C. BARKER.

THOS. S. SPRAGUE,  
MYRON H. CHURCH.