## T. KENYON.

ADJUSTABLE ELASTIC BUCKETS FOR CHAIN-PUMPS.

No. 189,629. Patented April 17, 1877.

fig.I.

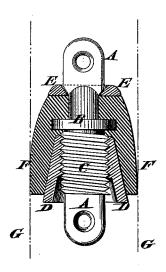
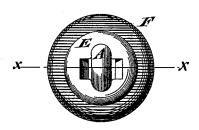


Fig.2.



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## UNITED STATES PATENT OFFICE.

THOMAS KENYON, OF HAMILTON, OHIO.

## IMPROVEMENT IN ADJUSTABLE ELASTIC BUCKETS FOR CHAIN-PUMPS.

Specification forming part of Letters Patent No. **189,629**, dated April 17, 1877; application filed March 12, 1877.

To all whom it may concern:

Be it known that I, THOMAS KENYON, of Hamilton, in the county of Butler and State of Ohio, have invented a new and useful Improvement in Adjustable Elastic Buckets for Chain-Pumps, of which the following is a specification:

Figure 1 is a longitudinal section of my improved bucket, taken through the line x x, Fig. 2. Fig. 2 is a top view of the same.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish improved buckets for chain-pumps, which shall be so constructed that they can be expanded and contracted to fit the pump-tube, and can be expanded to take up the wear, and which cannot be expanded by the downward pressure of a column of water, and thus made to fit the tube too tightly.

The invention will first be described in connection with the drawing, and then pointed

out in the claims.

A is the link, which has an eye in each end to receive the links of the chain. Upon the upper part of the link A, and above the working part of the packing when in the tube, is formed a collar, B, to receive and sustain the downward pressure of the column of water, and thus prevent said pressure from pressing the rubber packing downward and expanding it. Upon the link A, below the collar B, is cut a screw-thread, C, to receive a screw-thread cut in the inner surface of the cone D. F is the rubber packing, which is placed upon the link A, collar B, and cone D, as shown in Fig. 1, so that it may be expanded to fit a larger pump-tube, and to take up the wear by turning the screw-cone D upward, and may be contracted to fit a smaller tube by turning the screw-cone D downward. E

is a metal plate or washer placed upon the upper end of the link A, at the top of the rubber packing F, to sustain the said packing against the pressure of the cone D when screwed upward, to prevent the said pressure from pressing the said rubber packing out of place.

The washer E has a slot formed in it to enable it to pass down over the eye of the link A. The washer E, after being passed down over the eye of the link, is turned one-quarter around, when the pressure of the rubber packing F will prevent it from turning back, and

will thus keep it in place.

The screw-cone D is screwed up and down by grasping the rubber packing F in one hand, and turning the link A with a wrench held in the other hand.

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

- 1. The independent cone D, made adjustable under elastic bucket over a one-piece link, A, as shown and described, so as to regulate the adjustment of buckle without shortening the link.
- 2. The combination of link A, having a hole near each end, a collar, B, and a thread, C, with the internally-threaded cone D, washer E, and elastic bucket F, substantially as and for the purpose specified.

3. The lifting-collar B, formed upon the upper part of the link A, and above the working part of the packing F, when the bucket is in the tube, substantially as herein shown and described.

THOMAS KENYON.

Witnesses:

ISAAC PEACOCK, S. W. BROCK.