J. S. BEAZELL.

Chain Pump-Bucket.

No. 166,062. Patented July 27, 1875.

Fig. 1.

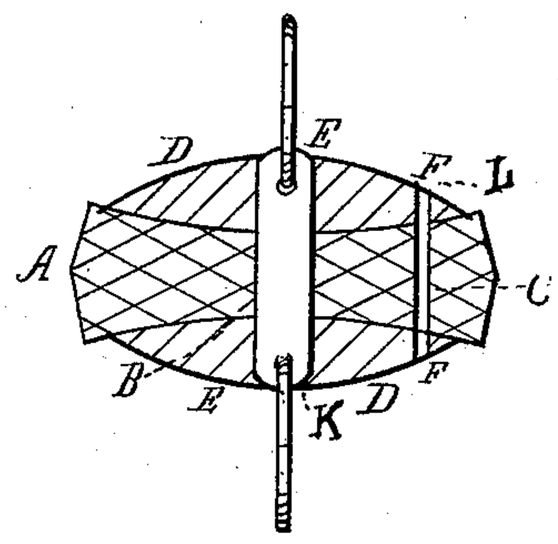


Fig. 2.

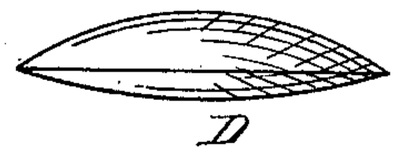


Fig. 3.

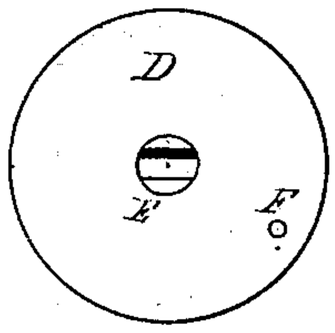
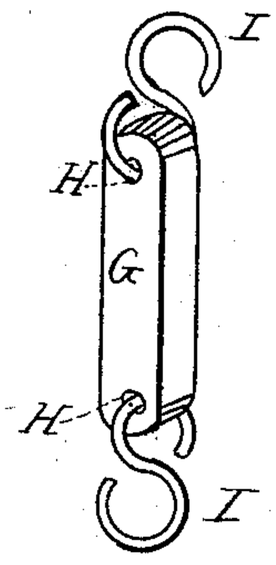


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN S. BEAZELL, OF CHILLICOTHE, MISSOURI.

IMPROVEMENT IN CHAIN-PUMP BUCKETS.

Specification forming part of Letters Patent No. **166,062**, dated July 27, 1875; application filed February 23, 1875.

To all whom it may concern:

Be it known that I, JOHN S. BEAZELL, of Chillicothe, county of Livingston, State of Missouri, have invented certain new and useful Improvements in Pump-Buckets for Chain-Pumps, of which the following is a specification, reference being had to the accompanying drawing.

This invention has for its object the production of a cheap, durable, and efficient pump-bucket for chain-pumps, and one that may be easily renewed or repaired when worn out or broken, by the use of a pair of pinchers, or other instrument possessing the properties of a vise, thereby dispensing with the services of an artisan, and obviating the necessity of purchasing an entire new chain.

To these ends my invention consists of an elastic disk having concave sides or faces, a central square or rectangular opening, and a smaller round opening near its edge, upon each side of which is placed a convexo-convex metallic disk having a central opening, and also one near the edge, said elastic and metallic disks being securely held together by an eyebolt having an eye in each end for the reception of a link, and being of such length that when inserted into the central openings in the said disks, the links can only be inserted into the eyes of said eyebolt by compressing the metallic disks upon the elastic disk, and causing the eyebolt to slightly project at both ends; and after the links have been inserted and the compressions removed, the expansion of the elastic disk will force the metallic disks outwardly against the links and prevent their withdrawal, except the disks be again compressed as before, all of which will hereinafter more fully appear.

Figure 1 is a vertical sectional view of a device embodying the improvements in my invention. Fig. 2 is a side view of one of the convexo-convex metallic disks. Fig. 3 is a plan view of Fig. 2. Fig. 4 is a view in perspective of the eyebolt and links.

In the accompanying drawings, the elastic disk A is provided with a rectangular opening, B, at its center, and a smaller circular opening, C, near its edge. The convexo-convex metallic disks D have the central opening E and the opening F near the edge. The eyebolt G is rectangular, and provided with an eye, H, at each end for the reception of a link, I, of a chain. The metallic disks D are placed one on each side of the elastic disk A, the central openings B and E E communicating, and the openings C and F F communicating. The eye bolt G is inserted in the elongated opening K, formed by the union of the central openings, the disks compressed together by a pair of pinchers or other vise-like instrument, and the links inserted into the eyes H H. When the compression is removed from the disks, the metallic disks D D will be forced outwardly against the links I I by the expansion of the elastic disk A, and the links can only be removed by again compressing the disks as before. The elongated opening L, formed by the union of the openings C and F F, is intended to permit the escape of the water from the pump-stock, to prevent freezing and to insure a supply of fresh water at every operation of the pump. Owing to the form of the central openings B and E E and the form of the eyebolt G, and slightly to the amount of friction exerted by the elastic disk A, the disks D D cannot be turned from their original position until the disk A is badly worn.

The amount of suction produced by the pump-bucket is so great that but three or four buckets need be used for one chain, and even then one revolution of the crank will fill a water-bucket.

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

1. In a pump-bucket for chain-pumps, an elastic central disk and metallic outer disks secured together by a rectangular eyebolt, having an eye in each end for the reception of a link, and of such length that the links can only be inserted into the eyes of said eyebolt by compressing the disks together, and causing the ends of the eyebolt to project from the bucket, substantially as and for the purposes set forth.

2. In combination, the elastic disk A, having openings B and C, metallic disks D D, having openings E and F, and the rectangular

eyebolt G, having eyes H H and links I I, substantially as and for the purposes set forth.

3. The rectangular eyebolt G, having eyes H H and links I I, as described, for the uses set forth.

In testimony that I claim the foregoing improvements in pump-buckets for chain-pumps, as above described, I have hereunto set my hand and seal this 20th day of February, 1875.

JOHN S. BEAZELL. [L. S.]

Witnesses:
CHARLES C. GILL,
THEODORE MUNGEN.