D. F. STOW.

Bucket for Chain-Pumps.

No. 160,125. Patented Feb. 23, 1875.

Fig. 1

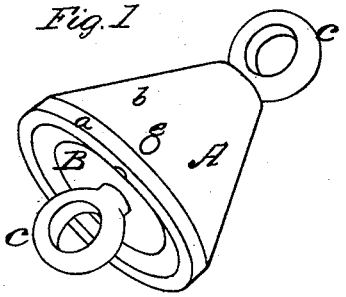


Fig. 2

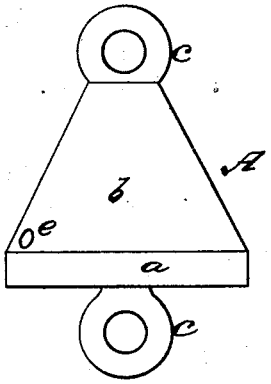
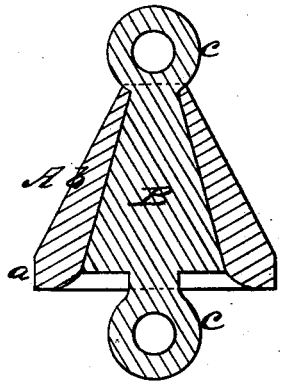


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

DELORAINE F. STOW, OF HORSEHEADS, NEW YORK.

IMPROVEMENT IN BUCKETS FOR CHAIN-PUMPS.

Specification forming part of Letters Patent No. **160,125**, dated February 23, 1875; application filed June 6, 1874.

To all whom it may concern:

Be it known that I, DELORAINE F. STOW, of Horseheads, in the county of Chemung and State of New York, have invented a new and valuable Improvement in Chain-Pump Buckets; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my bucket, and Fig. 2 is a side view. Fig. 3 is a sectional view.

This invention has relation to buckets which are designed for use in chain-pumps; and it consists in an india-rubber shell of a cylindro-conical form, inclosing a solid core, on the ends of which eyes are formed, whereby the required solidity is given to the conical portion of the core, and the rubber is prevented from cracking when it becomes hard from long use, as will be hereinafter explained more fully.

The following is a description of my improved bucket:

In the annexed drawings, A designates an india-rubber shell of a cylindro-conical form—that is to say, the portion *a* is cylindrical and fits the bore of the pump-tube, and the portion *b* is conical, with a hole through its apex. The bottom side of the shell A is beveled inwardly, so as to form a highly-elastic skirting, which will closely accommodate itself to the bore of the pump-tube. This elastic shell A is stretched on a solid metal cone, B, so that the skirting or cylindrical bottom portion *a* will extend below the base of cone B, and allow the elasticity above referred to. The cone B is constructed with eyes *c c* on its upper and lower ends, for attaching the bucket to the chain-links, and through the skirting *a* a small hole, *e*, is made for allowing the water in the pump-barrel to escape when the pump is not in operation.

I am aware that a chain-pump bucket has heretofore been constructed, consisting of a metallic frustum of a cone provided with flanges on its ends, between which is inserted a rubber ring, and I therefore lay no claim to such invention, which is extremely liable to become inoperative or bind in the pump-barrel, because the plane of the face of the ring is liable, in the operation of the device, to become oblique to the vertical axis of the pump-barrel on account of the inequality of the friction of the ring on the sides of the barrel, and of the play of the ring between the flanges of the frustum.

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

The chain-pump bucket herein described, having the cylindro-conical elastic shell A, fitted to the solid core B, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DELORAINE F. STOW.

Witnesses:

J. W. STARING,

G. F. TOMLINSON.