

E. J. DUNBAR.
Pump-Bucket.

No. 169,155.

Patented Oct. 26, 1875.

Fig: 1.

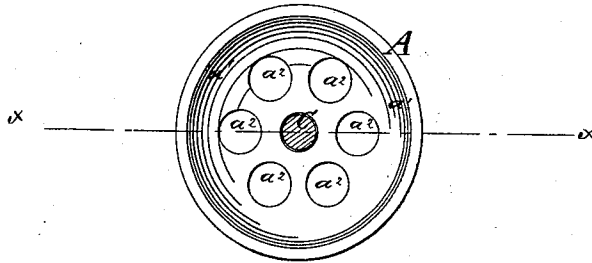
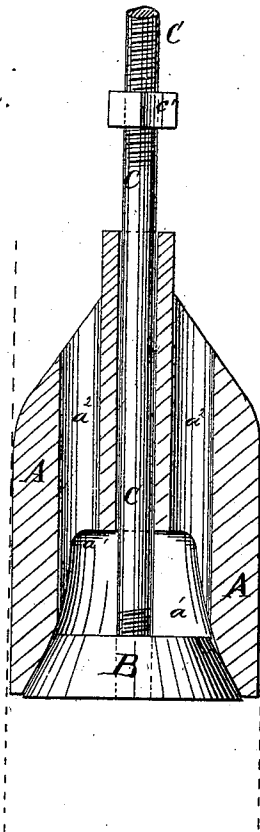


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EUGENE J. DUNBAR, OF ROMULUS, MICHIGAN.

IMPROVEMENT IN PUMP-BUCKETS.

Specification forming part of Letters Patent No. **169,155**, dated October 26, 1875; application filed September 11, 1875.

To all whom it may concern:

Be it known that I, EUGENE J. DUNBAR, of Romulus, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Pump-Buckets, of which the following is a specification:

Figure 1 is a bottom view of my improved bucket, the valve being removed. Fig. 2 is a vertical section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved bucket for suction pumps, which shall be so constructed as to fill the cavity of the pump-cylinder at each upward stroke, and to surely open at each downward stroke.

The invention consists in the bucket made of india-rubber, in cylindrical form, with a bell-shaped cavity in its lower end, and with longitudinal holes through it, the iron valve made in the shape of the frustum of a cone, and the iron rod provided with a stop-nut or collar, in combination with each other, as hereinafter fully described.

A is the body of the bucket, which is made of india-rubber, in cylindrical form, and with a rounded or conical upper end. In the lower end of the bucket A is formed a bell-shaped cavity, a^1 , from which a number of holes, a^2 , lead up through the top of said bucket to form passages for the water. B is the valve, which is made in the shape of the frustum of a cone, and which is of such a size as to enter the bell-shaped cavity a^1 of the bucket A, and expand the lower part of the said bucket, and cause it to fill the cavity of the pump-cyl-

der. The valve B is made of iron, and into a screw-hole in its center is screwed the lower end of an iron rod, C, which passes up through a hole through the center of the bucket A, and upon which is formed, or to which is attached at a little distance above the top of the bucket A, a nut or collar, c' , for the upper end of the said bucket A to strike against, to limit its upward movement upon the said rod c . The upper end of the rod C is screwed into, or otherwise attached to, the pump-rod.

In using the pump, in making the downward stroke the valve B moves out of the cavity of the bucket A, and the said bucket is then carried downward by the rod C, the water passing up through the holes a^2 of the bucket A. In making the upward stroke the valve B is drawn up into the cavity a^1 of the bucket A, expands its lower end to fill the cavity of the pump-cylinder, and then carries it up with it.

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

The bucket A, made of india-rubber, in cylindrical form, with a bell-shaped cavity, a^1 , in its lower end, and with longitudinal holes a^2 through it, the iron valve B, made in the shape of the frustum of a cone, and the iron rod C, provided with a nut or collar, c' , in combination with each other, substantially as herein shown and described.

EUGENE J. DUNBAR.

Witnesses:

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