

E. J. DUNBAR.
Pump-Bucket.

No. 169,155.

Patented Oct. 26, 1875.

Fig: 1.

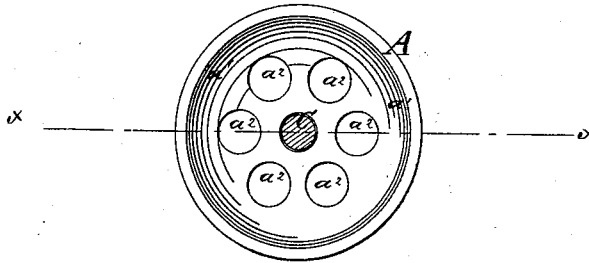
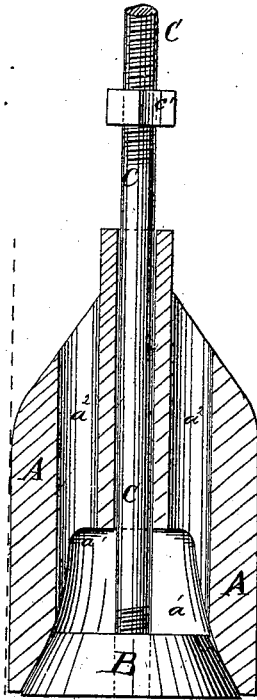


Fig: 2.



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-cylin-

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*¹, 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*¹, in combination with each other, substantially as herein shown and described.

EUGENE J. DUNBAR.

Witnesses:

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